

Trouble finding Icom radios? See...

AES[®]

AMATEUR ELECTRONIC SUPPLY

HAM RADIO CATALOG

SPRING/SUMMER 2004

5710 W. Good Hope Rd.
Milwaukee, WI 53223
414-358-0333
1-800-558-0411
Fax 414-358-3337
Service 414-358-4087
milwaukee@aesham.com

28940 Euclid Ave.
Cleveland, OH 44092
440-585-7388
1-800-321-3594
Fax 440-585-1024
cleveland@aesham.com

621 Commonwealth Ave.
Orlando, FL 32803
407-894-3238
1-800-327-1917
Fax 407-894-7553
orlando@aesham.com

4640 South Polaris Ave.
Las Vegas, NV 89103
702-647-3114
1-800-634-6227
Fax 702-647-3412
lasvegas@aesham.com

Store Hours
Mon-Fri • 9am to 5:30pm
Saturday • 9am to 3pm

1-800-558-0411
www.aesham.com

Gentlemen, Start your engines.

Dual Receivers

The '7800 has two identical, independent receiver circuits. Receive two different bands simultaneously on different antennas, with no adverse effects from one receiver to the other. Take your band hopping and contesting to the next level!

+40dBm IP3

Cutting edge digital meets the best of world class analog. Together, analog and digital now result in an amazing 110dB of receiver dynamic range and a +40dBm IP3 in the HF bands.

Independent AGC Settings:

Multiple AGC settings for each receiver. On-the-fly adjustment for either preset AGC settings, or a completely variable AGC control.

DUAL RECEIVER CONTROLS

Headphone Jack:

Stereo headphone connector. The stereo jack supplies either a combined audio or separate receiver audio for stereo headphones.

200W Output Power

Make your move. Newly designed, push-pull, power amplifiers using MOS-FET transistors work on 48V DC. They provide a powerful 200W output power at full duty cycle and low transmit IMD. Power your way to front of the pack.

Dual Receive Controls: Separate key receiver controls are available for each receiver. Whether in a contest, or just hopping around the bands, easy access to receiver controls such as volume, RF gain, and AGC adjustments are at your fingertips.

DUAL RECEIVER CONTROLS

Multiple Meter Readouts: See the latest in meter technology with the '7800's virtual meter system. These digital meters are visually superior to and of a higher performance than analog. Don't believe it? Log on to www.icomamerica.com/7800 and see for yourself!



CF Card Slot: The ultimate way to "take your rig with you". Just pull your CF card from your '7800, slide it into another '7800, and you now have your rig!

Retractable Controls: Pull out a knob, make your setting, then push the knob out of the way. As simple as this may seem, this feature keeps your radio "clean" looking and the controls out of the way.

IC-7800

THE ULTIMATE HF!

All four of them!

Multiple Spectrum Displays: "It's like having a piece of test gear on your desk" is one of the comments overheard when we first operated the '7800. You can select a standard spectrum display either centered on your operating frequency or a fixed range to view the band! You choose how you want to SEE the band, and then tune to what signals you see. (Photo shows the fixed range spectrum display.)

Four 32 bit Floating Point DSP Units:

The '7800 runs on four 32-bit floating point DSP units with 24-bit AD/DA converters, one each for the main RX, second RX, TX, and spectrum scope. Each unit accelerates data processing to whiplash speeds.

Triple Band Stack Registers:

Memorizes the last 3 used frequencies — quick recall for band hopping, provides the ultimate in multi-mode flexibility.

DUAL RECEIVER CONTROLS

Independent Digi-Sel Controls:

Incorporated into the IC-7800 is a newly designed digital pre-selector, with separate controls for each receiver.

DUAL RECEIVER CONTROLS

Dual Digital Twin PassBand Tuning: Only Icom brings you Digital Twin PassBand tuning. Adjustments can be made for each receiver without affecting the other receiver.

DUAL RECEIVER CONTROLS

More Dual Receive Controls:

In addition to the left side controls for volume, RF gain, and DSP controls, the '7800 also has independent controls for the Digital Twin PassBand tuning as well as the 70 dB Manual Notch filters.

DUAL RECEIVER CONTROLS

Digital Voice Recorder Controls:

Simple record and play controls for the internal DVR. Great for quick recording and playback of a call, great for reducing the number of broken calls in your log.

Independent Auto Tune: Automatically zero beat your CW or AM carrier signals. The '7800 makes sure you're right on the proper frequency for these modes. Each receiver has a separate control.

DUAL RECEIVER CONTROLS

Dual VFO Tuning Knobs: Independent-tuning knobs for each receiver. Change your receiver's operating frequency just by turning the knob. There's no mistake about which receiver you are adjusting, as the size difference allows for "no-look" operation!

DUAL RECEIVER CONTROLS

Now that we've got you all revved up... get a closer look at AES!

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CODES WITHIN THE PRICE GUIDE

(T) Item too large for ground shipment. Shipment by truck only. No COD, send payment in advance or use charge card for merchandise. Freight charges collected upon delivery.

Note: Charges for truck shipments from 1-99 lbs are running a minimum of \$80.00, plus local destination charges. It is advisable to contact a local freight office for a quotation.

(D) **DISCONTINUED** by Manufacturer but available from stock in limited quantities when price guide was published.

(T) **TEMPORARY LOW PRICE** due to special purchase, over stock, etc. Quantities may be limited at this price.

(A) Item not discontinued by Manufacturer but probably won't be available from AES when present stock is gone.

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ADI (ADI) AES Price

AT-201HP	5w 2m FM HT/batt/cgr/TTT	\$ 99.99
AT-401HP	5w 440 FM HT/batt/cgr/TTT	D 159.99
CHA-072	Wall charger for RBP-072 batt	4.99
CHA-120	Wall charger for RBP-120 batt	10.99
CHA-612	Wall charger for RBP-612 batt	1.99
CHA-672/CHA-607	Wall cgr; RBP-607 batt	1.99
PCA-145	Cig lighter cable, not for AT-600	14.99
RBP-120	12v 700mah NiMH	49.99
SD-911	Rapid charger	62.99
SLC-200/SLC200S	2.5w case; not AT-600	2.99
SLC-200-L	5w carrying case; not for AT-600	9.99
SLC-600-S	2.5w carrying case; AT-600	2.99
PTC-001	Mobile power pack; PR-series	19.99
RBP-22H	12v 1000mah NiMH batt; PR-series	49.99
SLC-22L	Leather case; PR-series	D 9.99

See Premier for speaker/mics for ADI HTs

AR-147-6	60w 2m FM Xcvt w/TTT mic	149.99
MTG BKT	Extra mobile bracket	9.99
PROG-47	PC prog soft/cable; AR-147/247/447	39.99
PWR CORD	Extra DC cable	9.99
AR-247-30w	30w 220 FM Xcvt w/TTT mic	209.99
MTG BKT	Extra mobile bracket	9.99
PROG-47	PC prog soft/cable; AR-147/247/447	39.99
PWR CORD	Extra DC cable	9.99

AES (AES)

Black On Air	Black ON AIR illuminated sign	\$ 69.99
Oak On Air	Oak ON AIR illuminated sign	69.99
PCL-1	20w mobile spkr w/3.5mm plug	19.99
SP-N	1.6kw 2.5GHz type N surge protector	39.99
SP-U	1.6kw 600MHz UHF surge protector	39.99
AP	Replacement ant-plug for SP-N/SP-U	9.99

AIM (AIM)

24-7735P	Coax stripper; RG-58/59/62	\$ 21.99
24-7736P	Coax stripper; RG-59/6/8281	21.99
24-7739P	Coax stripper; RG-8/11/213	28.99
38-305	500ma 3/4 5/6/7.5/9/12vdc adapter	9.99
38-312	1.2A 1.5/3/4.5/6/7.5/9/12vdc adapt	D 29.99
38-384	4A power supply; 5A surge	39.99

AES Price

AOR (AOR)

AR-3000AB	1-2036MHz dtx w/SSB/cell bld	1099.99
MM-1	Mobile mounting bkt; AR-3000AB	D 9.99
SDU-5500	Spectrum disp unit/PC interf	999.99
SDU-5600	Spectrum disp unit/PC interf	1299.99
AR-8600 Mk II-B	53M-2.04G base Rcvr/cell bld	899.99
SDU-5500	Spectrum disp unit/PC interf	999.99
SDU-5600	Spectrum disp unit/PC interf	1299.99
AR-8200 Mk III-B	5M-3G hand/SSB/cell bld	569.99
LC-8200	Leather case	24.99
SC-8200P	Soft case	13.99
LA-350	3-30MHz active loop antenna	339.99
350M	54-1.6MHz antenna element	76.99
ARD-9800	Digital voice/image interface	549.99
TDF-370	Multi-media terminal/DSP	299.99

ARRL (ARRL)

095	2004 Handbook Radio Amateur's Handbook	D \$ 49.95
099	2004 CD-ROM Radio Amateur's Handbook	39.95
100	2004 software Radio Amateur's Handbook	34.95
104	1990-94 QST on CD-ROM	39.95
105	1965-89 QST on CD-ROM	39.95
106	1980-84 QST on CD-ROM	39.95
107	1975-79 QST on CD-ROM	39.95
108	1970-74 QST on CD-ROM	39.95
109	1995-99 QST on CD-ROM	39.95
110	200 Meters and Down (early ham radio)	12.00
120	AC Power Interference Handbook	29.95
122	APRS Moving Hams on Radio & Internet	17.95
129	Antenna Book w/CD-ROM	39.95
130	Antenna Compendium 1	10.00
135	Antenna Compendium 2	14.00
137	Antenna Compendium 6 w/software	22.95
139	Antenna Compendium 5 w/software	20.00
140	Antenna Compendium 7	24.95
142	Best of the New Ham Companion	12.00
143	Beyond Line of Sight	12.00
149	DICCC countries list	4.00
150	Diking on the Edge	29.95
156	Extra Class License Manual	24.95
157	Extra Q & A Manual	17.95
160	FCC Rule Book	12.95
168	General Class License Manual	16.95
169	General Class License Manual	D 15.00
170	General Q & A Manual	D 12.95
171	General Q & A Manual	12.95
175	General Video Course/book/software	149.00
176	General Course/book/software only	29.00
180	Grid Locator Atlas	5.00
184	HF Digital Handbook 3rd edition	19.95
186	Ham Radio FAQ	14.95
188	Hints and Kinks 16th edition	15.95
190	Image Communications Handbook	25.95
192	Introduction to Morse Code CD's (2)	14.95
195	Introduction to Morse Code cassettes	14.95
198	Introduction to RF Design w/software	39.95
200	Low Power Communication	19.95
201	Log Book	5.00
202	Map of North America	15.00
205	Mining	4.95
208	More Wire Antenna Classics	14.00
210	Morse Code the Essential Language	8.00
236	Now You're Talking (new ham)	19.95
240	On the Air With Ham Radio	17.95
242	Operating Manual CD-ROM	D 29.99
243	Operating Manual	25.00
245	2004 Passport to Worldband Radio	22.95
254	1995 ARRL Periodicals CD-ROM	19.95
255	RFI Book	24.95
256	QRP Power	12.00
257	1996 ARRL Periodicals CD-ROM	19.95

ARRL - continued

258	RF Exposure and You	19.95
259	1997 ARRL Periodicals CD-ROM	19.95
260	Radio Puzzle	7.95
263	1998 ARRL Periodicals CD-ROM	19.95
266	1999 ARRL Periodicals CD-ROM	19.95
267	2000 ARRL Periodicals CD-ROM	19.95
268	2001 ARRL Periodicals CD-ROM	19.95
269	2002 ARRL Periodicals CD-ROM	19.95
270	2003 ARRL Periodicals CD-ROM	19.95
272	2003/2004 Repeater Directory	D 9.95
273	2004/2005 Repeater Directory	9.95
277	Satellite Anthology 5th edition	15.00
280	Satellite Handbook	24.95
301	10-15 wpm code practice audio CD	14.00
304	Simple and Fun Antennas for Hams	22.95
308	Spread Spectrum Source Book	20.00
310	Stealth Amateur Radio	14.95
312	Tech DVD Video Course/book/software	149.00
313	Tech VHS Video Course/book/software	149.00
314	Tech Course book/software only	29.00
316	Tech Q & A Manual	12.95
320	Transmitter Hunting	24.95
323	TravelPlus for Repeaters 03/04 CD	D 39.95
328	Understanding Basic Electronics	20.00
329	Vertical Antenna Classics	12.00
330	VHF/UHF Antenna Classics	14.95
340	W1FB's QRP Notebook	10.00
342	Weather Satellite Handbook	20.00
344	Wire Antenna Classics	14.00
346	World Azimuthal Map	15.00
347	World Amateurs World Atlas	12.95
348	World Robinson Map	15.00
350	Yagi Antenna Classics	17.95
354	Your Mobile Companion	12.00

ATOC IRON HORSE (ATO)

AN-38	NMO to 3/8-24 thread adapter	\$ 13.99
ATA-144	2m 2.5db glass mounted 27.5" ant	23.99
ATA-270	2m/440 2.5/4db glass mt 26" ant	29.99
IH-4501	4 x 5" 3/8-24 quad magnet mt	52.99
IH-4501-S0	4 x 5" SO-239 mt quad magnet mt	57.99
IHF-5S	Set of 5 HF mob ants (10/15/20/40/75)	89.99
IHF-6	6m 7' mobile antenna	19.99
IHF-10	10m 7' mobile antenna	19.99
IHF-12	12m 7' mobile antenna	19.99
IHF-15	15m 7' mobile antenna	19.99
IHF-17	17m 7' mobile antenna	19.99
IHF-20	20m 7' mobile antenna	19.99
IHF-30	30m 7' mobile antenna	19.99
IHF-40	40m 7' mobile antenna	22.99
IHF-75	75m 7' mobile antenna	26.99
IHND-3S	Set of 5 quick disconnects	21.99
IHF-5MS	Set of 5 HF minv mob (10/15/20/40/75)	89.99
IHFM-6	6m 42" mini mobile antenna	19.99
IHFM-10	10m 36" mini mobile antenna	19.99
IHFM-12	12m 36" mini mobile antenna	19.99
IHFM-15	15m 39" mini mobile antenna	19.99
IHFM-17	17m 39" mini mobile antenna	19.99
IHFM-20	20m 41" mini mobile antenna	19.99
IHFM-30	30m 40" mini mobile antenna	19.99
IHFM-40	40m 44" mini mobile antenna	22.99
IHFM-75	75m 76" mini mobile antenna	26.99
IHFM-80	80m 76" mini mobile antenna	27.99
IHMM-144	2m 25w X wave mag mt ant/ENC	17.99
IHMM-220	220 25w X wave mag mt ant/ENC	17.99
IHMM-270	2m/440 25w X wave mag mt ant/ENC	17.99
IHMM-440	440 25w X wave mag mt ant/ENC	17.99
IHSB-2	Flat stake bed mt w/SD-239 & 1/4-24	23.99
IHSB-4	Triangular stake bed mt w/SD-239 & 1/4-24	29.99
IHTH-1	1/4-24 trailer hitch antenna mount	17.99

AES Price

Alan Broadband (ALA)

Zap Checker Radio transmitter/bug detector \$ 89.99

ALINCO (ALI)	
DJ-C5T 300mw cc size 2m/440 HT/ith ion/spkr	\$149.99
EDC-16B Cigarette lighter cable w/filter	21.99
EDC-36 Angle plug power cable w/filter	24.99
EME-17 Boom earphone mic	32.99
EME-18 Earphone	8.99
EDS-7 Mic adapter; EME-17/18	12.99
EME-20 Tie-pin mic & earphone	17.99
EMS-49 Miniature lapel spkr/mic	32.99
EMS-50 Speaker/mic	41.99
ESC-34 Soft case w/belt clip	13.99
EDC-55 Drop-in cgr; EBP30/31/32N; GIT	6.99
EDH-12 DC jack adapter; DJ-180TH/280TH	9.99
EJ-14U 50 ch mem unit; DJ-180TH/280TH	14.99
EME-11 Ear/mic w/PTT/VOX; DJ-180/280TH D	14.99
ESC-18 Soft case; 180TH/EBP-26N	1.99
ESC-19 Soft case; 180TH/EBP-28N	6.99
DJ-196T 5w 2m FM HT/batt/cgr/TTP	139.99
DJ-296T 5w 220 FM HT/batt/cgr/TTP	179.99
DJ-496T 5w 440 FM HT/batt/cgr/TTP	149.99
DJ-596T MK II 5w 2m/440 HT/NIMH/cgr/TTP	209.99
EBG-6 Mobile bracket	15.99
EBP-48N 9.6v 700mah 5w nicad battery	64.99
EBP-50N 9.6v 700mah 5w NIMH battery	23.99
EBP-51N 9.6v 1500mah 5w NIMH battery	37.99
EBP-56N 7.4v 1000mah lithium ion battery	49.99
EDC-111 Charger for EBP-56N	45.99
EDC-16B Cigarette lighter cable w/filter	21.99
EDC-36 Angle plug power cable w/filter	24.99
EDC-37 13.8v power cable	7.99
EDC-43 Cig lighter cable	10.99
EDC-88 Quick charger; nicad battery packs	59.99
EDC-97 Quick charger; MIMH battery packs	70.99
EDH-30 Dry cell battery case	15.99
EJ-43U Digital board for DJ-596T only	99.99
EJ-47U Digital board; Mk II versions	179.99
EME-6 Earphone	10.99
EME-12 Headset w/earphone/mic/VOX	69.99
EME-13 Headset w/ear bud/mic/VOX	69.99
EME-15 Earphone/mic w/VOX	56.99
EME-17 Boom earphone mic	32.99
EME-20 Tie-pin mic & earphone	17.99
EMS-47 Spkr/mic w/volume control	24.99
ERW-4C PC cable	39.99
ESC-36 Soft case for EBP-48N	13.99
SW-596 Windows prog software; DJ-596T	29.99
DJ-V5TH 5w 2m/440 FM HT/batt/cgr/TTP	209.99
EBP-46N 9.6v 600mah 5w nicad battery	64.99
EDC-16B Cigarette lighter cable w/filter	21.99
EDC-36 Angle plug power cable w/filter	24.99
EDC-37 13.8v power cable	7.99
EDC-43 Cig lighter cable	10.99
EDC-91 Quick charger	59.99
EDH-29 Dry cell case for 4-AA's	12.99
EME-6 Earphone	10.99
EME-12 Headset w/earphone/mic/VOX	69.99
EME-13 Headset w/ear bud/mic/VOX	69.99
EME-15 Earphone/mic w/VOX	56.99
EME-17 Boom earphone mic	32.99
EME-20 Tie-pin mic & earphone	17.99
EMS-8Z Remote speaker/mic	49.99
EMS-47 Spkr/mic w/volume control	24.99
ESC-35 Soft case for EBP-45N/46N	13.99
DJ-S11T 340mw 2m FM HT/battery holder	79.99
EBG-6 Mobile bracket	15.99
EDC-78 Wall charger; (not for alkalines)	7.99
EDH-18 12v to 5.5v DC/DC conv/cig plug	29.99
EME-6 Earphone	10.99

Alinco - continued	
EME-12 Headset w/earphone/mic/VOX	69.99
EME-13 Headset w/ear bud/mic/VOX	69.99
EME-15 Earphone/mic w/VOX	56.99
EME-17 Boom earphone mic	32.99
EME-20 Tie-pin mic & earphone	17.99
EMS-47 Spkr/mic w/volume control	24.99
ESC-27 Soft case	16.99
DJ-S40T 500mw 440 FM HT/battery holder	89.99
EBG-6 Mobile bracket	15.99
EBP-52N 3.6v 500mah NIMH battery	37.99
EBP-53N 6v 500mah NIMH battery	45.99
EBP-54N 3.6v 1500mah NIMH battery	49.99
EDC-37 13.8v power cable	7.99
EDC-43 Cig lighter cable	10.99
EDC-105 Drop-in NIMH battery cgr, less ps	24.99
EDC-93 Wall ps for EDC-105	10.99
EDH-31 Dry cell battery case	12.99
EME-6 Earphone	10.99
EME-12 Headset w/earphone/mic/VOX	69.99
EME-13 Headset w/ear bud/mic/VOX	69.99
EME-15 Earphone/mic w/VOX	56.99
EME-17 Boom earphone mic	32.99
EME-20 Tie-pin mic & earphone	17.99
EMS-8Z Remote speaker/mic	49.99
EMS-47 Spkr/mic w/volume control	24.99
ESC-37 Soft case	13.99
EDH-27 Dry cell case w/charger; DJ-X2T	29.99
EDH-28 DC/DC converter w/cig plug; DJ-X2T	24.99
DJ-X3T 1MHz-1.3GHz AM/FM hand rcv/cell blkd	209.99
EBP-52S 3.6v 500mah NIMH battery	37.99
EDC-105 Drop-in NIMH battery cgr, less ps	24.99
EDC-93 Wall ps for EDC-105	10.99
EDH-31S Dry cell battery case	12.99
ERW-4C PC cable	39.99
ESC-37 Soft case	13.99
DJ-X10T 1MHz-2GHz AM/FM/USB hand rcv/cell blkd	309.99
EBP-33N 4.8v 650mah nicad battery	19.99
EBP-34N 4.8v 1200mah nicad battery	79.99
EBP-37N 4.8v 700mah nicad battery	34.99
EDC-16B Cigarette lighter cable w/filter	21.99
EDC-36 Angle plug power cable w/filter	24.99
EDC-37 13.8v power cable	7.99
EDC-43 Cig lighter cable	10.99
EDC-88 Quick charger; nicad battery packs	59.99
EDH-16 Dry cell battery case	12.99
EME-6 Earphone	10.99
ESC-28 Soft case for EBP-33N	13.99
ESC-29 Soft case for EBP-37N	13.99
ESC-30 Soft case for EBP-34N	13.99
DJ-X200T 1-2149MHz receiver/cell blocked	499.99
EBP-33N 4.8v 650mah nicad battery	19.99
EBP-34N 4.8v 1200mah nicad battery	79.99
EBP-37N 4.8v 700mah nicad battery	34.99
EDC-16B Cigarette lighter cable w/filter	21.99
EDC-36 Angle plug power cable w/filter	24.99
EDC-37 13.8v power cable	7.99
EDC-43 Cig lighter cable	10.99
EDC-88 Quick charger; nicad battery packs	59.99
EDH-16 Dry cell battery case	12.99
EME-6 Earphone	10.99
ERW-4C PC cable	39.99
ESC-28 Soft case for EBP-33N	13.99
ESC-29 Soft case for EBP-37N	13.99
ESC-30 Soft case for EBP-34N	13.99
DR-M06TH 20w 6m FM Xcvr/TTP/encoder	259.99
MB-130 Extra mobile bracket	19.99
HK-130 Hardware kit for MB-130	4.99
PC-15B Extra DC cable	10.99
DR-135T Mk II Blk 50w 2m FM Xcvr/TTP mic	169.99
DR-235T Black 25w 220 FM Xcvr w/TTP mic	249.99
DR-435T Mk II Blk 35w 440 FM Xcvr/TTP mic	269.99

Alinco - continued	
EDC-37 13.8v power cable; ignition on/off	7.99
EDC-43 Cig lighter cable; ignition on/off	10.99
EJ-40U Dig board; DR-135T/TP/235T/435T	99.99
EJ-41U 1200/9600 TNC unit	129.99
EJ-47U Digital board; Mk II versions	179.99
ERW-4C PC cable	39.99
MB-130 Extra mobile bracket	19.99
HK-130 Hardware kit for MB-130	4.99
PC-15B Extra DC cable	10.99
SW-620 Windows programming software	29.99
DR-135TP Black 50w 2m FM/TTP/1200/9600 TNC D	249.99
DR-135TP Mk II Blk 50w 2m FM/TTP/1200/9600 TNC	269.99
EDC-37 13.8v power cable; ignition on/off	7.99
EDC-43 Cig lighter cable; ignition on/off	10.99
EJ-40U Dig board; DR-135T/TP/235T/435T	99.99
EJ-47U Digital board; Mk II versions	179.99
ERW-4C PC cable	39.99
MB-130 Extra mobile bracket	19.99
HK-130 Hardware kit for MB-130	4.99
PC-15B Extra DC cable	10.99
SW-620 Windows programming software	29.99
EJ-19U Memory expansion unit; DR-430TQ	4.99
DR-605TQ 50/35w 2m/440 FM/TTEJ24U tone sq	339.99
EMS-14 Desk top microphone	114.99
EDS-8 Adapter for EMS-14 w/DR-605TQ	28.99
MB-130 Extra mobile bracket	19.99
HK-130 Hardware kit for MB-130	4.99
PC-15B Extra DC cable	10.99
DR-620T 50/35w 2m/440 FM Xcvr/TTP	339.99
EDS-9 Separation kit	45.99
EJ-47U Digital board for DR-620T	179.99
EJ-50U TNC unit for DR-620T	129.99
ERW-4C PC cable	39.99
MB-130 Extra mobile bracket	19.99
HK-130 Hardware kit for MB-130	4.99
PC-15B Extra DC cable	10.99
SW-620 Windows programming software	29.99
DX-70TH Comp HF Xcvr/100w 6m/mob bkt	699.99
DM-330MVT 30A switching ps/meter/32A surge	179.99
EBG-8 Front control head bracket	15.99
EDS-9 Extra mobile bracket	32.99
EDC-4 Rem mt acc kit w/S cable, 2 covers	41.99
EDS-5 15' microphone extension cable	36.99
EDS-6 15' remote cable	68.99
EDX-2 160-10m 200w wire auto tuner	319.99
EMS-14 Desk top microphone	114.99
PC-25 Extra DC cable	35.99
DX-77T 160-10m HF Xcvr	669.99
DM-330MVT 30A switching ps/meter/32A surge	179.99
EDS-5 5' microphone extension cable	36.99
EDX-2 160-10m 200w wire auto tuner	319.99
EMS-14 Desk top microphone	114.99
PC-25 Extra DC cable	35.99

ALPHA DELTA (ALP)	
ATT-3650 200w 3GHz type N surge protector	\$ 59.99
ATT-3650-HP 2kw 3GHz type N surge protector	59.99
ATT-3650U 200w 500MHz UHF surge protector	49.99
ATT-3650U-HP 2kw 500MHz UHF surge protector	49.99
ATT/3650 Extra 200w arc-plug cartridge	14.99
ATT-HP/3650HP Extra 2kw arc-plug cart	14.99
Delta-2 500 MHz 2-pos coax switch/protector	49.99
Delta-2/N 1.3 GHz 2-pos type N switch/protector	64.99
Delta-4 500 MHz 4-pos coax switch/protector	79.99
Delta-4/N 1.3 GHz 4-pos type N switch/protector	89.99
D-4 Extra arc-plug; Delta-2/2N/4/4N	9.99
Delta-C Kit w/ctr ins/2 end ins/static protect	29.99
SEP Extra arc-plug cart; DX-Ultra/Delta-C	15.99
Delta-CIN Antenna end insulator	1.99
DX-80 80m 134' complete dipole antenna	49.99
DX-40 40m 67' complete dipole antenna	39.99
DX-40/20 40/20m 40' low profile dipole antenna	89.99

Alpha Delta - continued AES Price

DX-20	20m 34' complete dipole antenna	39.99
DX-A	160-80-40m twin sloper antenna	59.99
DX-B	160-80-40-30m 60' sloper ant	69.99
DX-CC	80-10m 5-band 82' no trap, no tuner dipole	119.99
DX-DD	80/40m 82' Delta Dipole antenna	89.99
DX-EE	40-10m 4-band 40' no trap, no tuner dipole	99.99
DX-LB	160-80-40m 100' shortened dipole	119.99
DX-LB Plus	160/80/40/20/15/10m 100' short dip	149.99
DX-SWL	AM broadcast-13m 60' SWL sloper ant	79.99
DX-Ultra	AM broadcast-30MHz 80' SWL dipole	109.99
SEP	Extra arc-plug cart; DX-Ultra/Delta-C	15.99
Outpost	Base tripod mtg sys for mobile ant	199.99
Pathfinder	1.8-30MHz+6m dig auto ant tuner	399.99
Pathfinder	1.8-54 dig 6pos coax switch/protector	149.99
SK-1	Straight Kent key	129.99
SP-1	Single paddle Kent key	139.99
TP-1	Twin paddle iambic Kent key	149.99
VK-1	Vail Correspondent Kent straight key	179.99
Basic Technology	Amateur Radio video & book	29.99

Also see OUTBACKER

AMECO PUBLICATIONS (AME)

4-01	Code Course Instruction Booklet	\$ 2.99
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CODE COURSES - CASSETTE TAPES

100-T	Junior code tape, 0-7% wpm	\$ 5.95
107-PC-2	IBM Morse Code Course, version 2.0	29.95

CODE PRACTICE OSCILLATORS & CODE KEYS

K-1	Bakelite type key	\$ 10.95
K-4	Brass type key	16.95
OCM-2K	Code oscillator & CW monitor kit	19.99
OCM-2W	Wired oscillator & CW monitor	24.99

PREAMPLIFIERS

TPA	HF receive preamp & indoor active ant	\$ 76.99
P-9T	Power supply for TPA	9.99
PT-3	2-54 MHz transceiver preamp	124.99
P-12T	Power supply for PT-3	9.99

FILTERS

HP-75T	75 ohm high-pass filter	\$ 12.99
HP-300T	300 ohm high-pass filter	12.99

AMERITRON (AMR)

AL-80B	1kw PEP out linear amp (3-500Z)	1249.99
AL-82	1.5kw PEP out linear amp (2.3-500Zs)	2199.99
AL-572	1.3kw PEP out linear amp (4-572Bs)	1349.99
AL-800	1250w PEP out linear (3CX800A7)	1699.99
AL-800H	1.5kw PEP out amp (2 3CX800A7)	2499.99
AL-811	600w PEP out linear amp (3 811As)	599.99
AL-811H	800w PEP out linear amp (4 811As)	749.99
AL-1200	1.2kw PEP out linear (3CX1200A7)	2299.99
AL-1500	1.5kw out linear amplifier (8877)	2649.99

ALS-500M	500w PEP out solid state mob amp	699.99
ALS-600M	600w PEP out solid state amp w/ps	1129.99

ARB-704	Amplifier Xcvt interface buffer	49.99
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PNP-5M	Plug & play cable; FT-847	15.99
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PNP-7D	Plug & play cable; TS-50S/870S/2000	15.99
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PNP-8D	Plug & play cable; FT-920/1000 series	15.99
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PNP-8M	Plug & play cable; FT-817/840	15.99
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PNP-8MK	Plug & play cable; TS-480	15.99
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PNP-13D	Plug & play cable; IC-706 series	15.99
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PNP-35	Plug & play cable; FT-100 series	15.99
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ARB-70412	Ampl Xcvt interface/cbl; IC-706 series	49.99
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ATP-100	Amplifier tuning pulser	49.99
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ATP-102	Deluxe amplifier tuning pulser	59.99
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ATR-20	1.2kw PEP antenna tuner	419.99
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ATR-30	3kw PEP antenna tuner	549.99
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ADL-1500	1.5kw dummy load with oil	69.99
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ADL-2500	2.5kw dummy load with fan	189.99
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ICP-120	120v inrush protector	79.99
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ICP-240	240v inrush protector	79.99
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AWM-30	3kw PEP SWR/wattmeter/rem sens	139.99
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Ameritron - continued AES Price

QSK-5	Stand alone T/R switch	329.99
QSK-5PC	PC board kit; T/R switch	229.99
CF-5	Cooling fan for QSK-5	39.99
RCS-4	4-pos wireless remote coax switch	129.99
RCS-8V	160-2m 5-pos remote coax switch	139.99
RCS-8VN	160-2m 5-pos N rem coax switch	149.99
Note: RCS-8V/10N require 8-wire control cable.		
RCS-10	DC-100MHz 8-pos remote coax switch	149.99
Note: RCS-10 requires 4-wire control cable.		

ANTENEX (ANX)

AB-FT	118-896MHz 1/4 wave NMO whip	\$ 16.99
AB-SCANC	VHF/UHF/800MHz NMO mob scan ant	29.99
BB-1442N	144-174 2.4db no grid plane NMO mob	39.99
BB-1443	144-174MHz 3db 49" NMO mobile	39.99
BB-4303	430-450 3db 11 1/2" NMO mobile	34.99
CB-144/440C	2m/440 2/5db 36" NMO mobile	49.99
CWB-1443	Self-tuning 144-156 3db NMO mob	49.99
CWB-4405C	Self-tuning 440-470 5db NMO mob	49.99
GB-8PST1	NMO mag mt w/coax & teflon PL259	29.99
GPSU-156BNC	GPS mag mt w/coax & BNC	99.99
LBMB-9034	Mirror mt 1/2" hole L-bracket	10.99
MB-8PST	NMO hole mt w/coax & teflon PL259	15.99
TRAB-1420	142-164 Phantom whipless NMO	59.99
TRAB-4303	430-450 3db Phantom whipless NMO	29.99
VTPM	NMO mt; up to 1" thick plate (UHF barrel)	15.99
Y-1363	136-150 3el 7.1db gold welded beam	119.99
Y-4303	430-450 3el 7.1db gold welded beam	99.99

Antenna Specialists (ASP)

APR143	2m 23" on glass cell look-alike ant	\$ 69.99
APR151.3	2m 3db 33" on glass antenna	69.99
KAV-353	On glass replacement mtg kit	12.99
KAV-382	On glass replacement mtg kit	12.99

Antenna Supermarket (ANT)

Eavesdropper*	60-11m trap dipole SWL ant	\$ 89.99
*Specify QD-239 or twin-lead		

ANTENNA WORLD (ANW)

COM136-4500NP	VHF/UHF port dipole/BNC	\$ 19.99
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ARROW Antenna (ARA)

146/437-10	3 el 2m/7 el 440 handheld beam	\$ 73.00
146/437-10BP	3el 2m/7el 440 HF split bm beam	79.00
10w duplexer (installs in boom) w/BNC		59.00
10w duplexer (installs in boom) w/SMA		64.00

ARTSCI (ART)

Lost Users Manuals		\$ 19.95
Repeater Mapbook 11th edition		14.99

ASTRON (ASR)

RS-4L	3A ps, 4A surge, w/cig lighter socket	\$ 49.99
RS-7A	5A power supply, 7A surge	59.99
RS-10A	7.5A power supply, 10A surge	69.99
RS-12A	9A power supply, 12A surge	79.99
RS-12S	9A ps, 12A surge, w/speaker	89.99
RS-20A	16A power supply, 20A surge	99.99
RS-35A	25A power supply, 35A surge	149.99
RS-35A/220V	220v 25A ps, 35A surge	169.99
RS-50A	37A power supply, 50A surge	219.99
RS-70A	57A power supply, 70A surge	259.99
RS-20M	16A ps w/meters, 20A surge	119.99
RS-35M	25A ps w/meters, 35A surge	169.99
RS-50M	37A ps w/meters, 50A surge	239.99
RS-70M	57A ps w/meters, 70A surge	289.99
VS-20ML	Variable 16A ps/meters, 20A surge	139.99
VS-35M	Variable 25A ps/meters, 35A surge	189.99
VS-50M	Variable 37A ps/meters, 50A surge	259.99
RM-35M	25A rack mt ps/meters, 35A surge	249.99
RM-50M	37A rack mt ps/meters, 50A surge	279.99
RM-60M	50A rack mt ps/meters, 55A surge	359.99

Astron - continued AES Price

SS-25	20A switching ps, 25A surge	109.99
SS-25M	20A switching ps/meters, 25A surge	129.99
SS-30	25A switching ps, 30A surge	119.99
SS-30M	25A switching ps/meters, 30A surge	139.99
12/115	200w 12vdc-115vac inverter	34.99
N2412-12	10A 22-32vdc to 13.8vdc converter	49.99
N2412-24	20A 22-32vdc to 13.8vdc converter	79.99

BMI (BMI)

972AD	14" 12/24-hour wall clock	\$ 32.99
973A	12" 24-hour wall clock	49.99

B & W (B&W)

AP-10A	51" portable 40/20/15/10/6/2m ant	\$ 89.99
AS-160	160/80/40/20m 137' trap dipole	149.99
AS-40	40/20/15/10m 40' trap dipole ant	149.99
AC-1.8-30	Continuous 1.8-30 MHz vee ant	209.99
ACS-1.8-30	Continuous 1.8-30 stainless vee D	339.99
AXS-160	160/30m 96' trap dipole antenna D	59.99
AXS-80	80/40/15m 65' trap dipole ant	89.99
AC-5-30	5-30 MHz 65' folded dipole	169.99
ACS-5-30	5-30 MHz stainless 65' folded dipole D	249.99
BWDS-1.8-30	1.8-30 stainless 90' folded dip D	299.99
BWD-20	14-30 MHz 20' folded dipole	179.99
BWD-45	7-30 MHz 45' folded dipole	189.99
BWD-65	4-30 MHz 65' folded dipole	199.99
BWDS-65	4-30 MHz stainless 65' folded dipole D	319.99
BWD-90	1.8-30 MHz 90' folded dipole	209.99
BWDS-90	1.8-30 stainless 90' folded dipole D	339.99
FDMK	Mtg kit; folded dipole w/3 pole installation	39.99

BELDEN (BEL)

52 OHM COAXIAL CABLE

8216	RG-174 (sub-miniature)	per ft.	\$.29
8216		100 ft. Roll	27.99
8216		500 ft. Roll	99.99
8216		1000 ft. Roll	184.99
8240	RG-58U (solid center)	per ft.	.30
8240		100 ft. Roll	28.99
8240		500 ft. Roll	109.99
8240		1000 ft. Roll	199.99
8259	RG-58AU (stranded center)	per ft.	.32
8259		100 ft. Roll	30.99
8259		500 ft. Roll	109.99
8259		1000 ft. Roll	199.99
8219	RG-58AU (stranded, foam)	per ft.	.32
8219		100 ft. cut	29.99
8219		500 ft. Roll	104.99
8219		1000 ft. Roll	189.99
8262	RG-58CU (non-contaminating)	per ft.	.39
8262		100 ft. cut	36.99
8262		500 ft. Roll	139.99
8262		1000 ft. Roll	249.99
8258	RG-8X (stranded, foam)	per ft.	.39
9258		100 ft. cut	34.99
9258		500 ft. Roll	129.99
9258		1000 ft. Roll	239.99
8237	RG-8U	per ft.	.64
8237		100 ft. Roll	59.99
8237		500 ft. Roll	249.99
8214	RG-8U (foam)	per ft.	.59
8214		100 ft. Roll	54.99
8214		500 ft. Roll	259.99
8214		1000 ft. Roll	489.99
9913	RG-8U (low loss)	100 ft. Roll	59.99
9913		250 ft. Roll	129.99
9913		500 ft. Roll	239.99
9913F7	RG-8U (low loss, flexible)	per ft.	.87
9913F7		100 ft. Roll	79.99

Belden - continued

9913F7	250 ft. Roll	159.99
9913F7	500 ft. Roll	289.99
9251	RG-8A (non-contaminating) ...per ft., Δ	.64
9251	100 ft. cut, Δ	59.99
9251	500 ft. Roll, Δ	279.99
8267	RG-213 (non-contaminating) ...per ft.	.87
8267	100 ft. cut	79.99
8267	500 ft. Roll	349.99

75 OHM COAXIAL CABLE

8241	RG-59U (73 ohm, solid center) ...per ft.	.32
8241	100 ft. Roll	29.99
8241	500 ft. Roll	94.99
8241	1000 ft. Roll	179.99
8238	RG-11 (75 ohm, stranded center) per ft.	.99
8238	100 ft. cut	94.99
8238	500 ft. Roll	349.99
8213	RG-11 (75 ohm, solid, foam) ...per ft.	.89
8213	100 ft. cut	84.99
8213	500 ft. Roll	314.99

ROTOR CABLE

8484	4-wire, 4-20 gauge ...per ft.	.32
8484	100 ft. cut	29.99
8484	500 ft. Roll	114.99
8484	1000 ft. Roll	214.99
8448	8-wire, 2-18, 6-22 gauge ...per ft.	.34
8448	100 ft. cut	29.99
8448	500 ft. Roll	129.99
8448	1000 ft. Roll	249.99
9405	8-wire, 2-16, 6-18 gauge ...per ft.	.74
9405	100 ft. cut	69.99
9405	500 ft. Roll	319.99
9405	1000 ft. Roll	599.99

COPPERWELD ANTENNA WIRE

8000	No. 14 stranded antenna wire ...per ft.	.26
8000	100 ft. Roll	22.99
8000	1000 ft. Roll	189.99

No. 8 ALUMINUM GROUND WIRE

8018	Multiples of 50 ft. ....each	\$ 15.99
8018	500 ft. Roll, Δ	69.99

Note: All above roll pricing is for rolls as shown only; all other lengths, even if more than roll length shown or a multiple of roll length shown, are sold at the per ft. price.

FOAM COAX w/PL-259s ON BOTH ENDS

9354	50' RG-8U foam	\$ 54.99
9355	75' RG-8U foam	74.99
9356	100' RG-8U foam	84.99

BELMERIT (BLM)

DM-80	Credit card size multimeter w/case ...	\$ 29.99
DX-405	10 func/39 range+20MHz freq multimeter	69.99

BENCHER (BEN)

BY-1	Iambic keyer paddle w/black base	\$109.99
BY-2	Iambic keyer paddle w/chrome base	129.99
BY-3	Iambic keyer paddle, gold plated	299.99
BY-4	Iambic paddle/blk base/gold components	169.99
170-82	Mercury paddle	449.99
ST-1	Single lever keyer paddle, black base	109.99
ST-2	Sgl lever kyr paddle, chrome base	129.99
RJ-1	Dlx hand key w/navy knob/black base	105.99
RJ-2	Dlx hand key w/navy knob/chrome base	129.99
HWK	Hardware kit; ZA-1A for 2" boom	.69
YA-1	1kw low pass filter	85.99

Bounty Hunter (BOU)

Fast Tracker	Metal detector/2-tone target ID	\$ 99.99
Tracker IV	Metal detector/3-mode	129.99
Quick Draw II	Metal detector/full motion	229.99

Bounty - continued

Sharp Shooter II	Metal detector/LCD readout	299.99
Land Star	Metal detector/3-tone audio discrim	349.99
Land Ranger	Metal detector/programmable	449.99
Time Ranger	Metal detector/top-of-the-line	549.99
Carry Bag	For Bounty Hunter metal detectors	29.99
10" Coil	10" magnum coil; adds depth	49.99

BUCKMASTER (BUC)

HamCall	CD-ROM ham listings	\$ 50.99
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BUSHNELL (BUS)

13-0430	4x30 LiteVision compact binoculars	\$ 13.99
13-0721	7x21 compact Falcon binoculars ..D	19.99
13-1226	12x25 camo FRP compact binocs	29.99
13-1250	12x50 wide angle Powerview binocs	59.99
13-2514	8x21 black compact binoculars	21.99
13-3410	7x35 Falcon binoculars	29.99
26-3150	Night Vision 3.1x50 binocular	459.99
78-0040	90mm refractor telescope	369.99
78-0200	4.5" reflector telescope	269.99
78-2010	4.5" reflector telescope	199.99
78-2061	20-60x60 spotting scope w/tripod	79.99
78-0101	125° 9mm Kellner eye, 0040/6000/8000 Δ	19.99
78-0102	1.25" 25mm Kellner eyepiece ..Δ	19.99
78-0105	125° 2" Barlow lens, 0040/0200/6000/8000 Δ	29.99
10-1907	Speedster sports speed gun	199.99
10-1911	Velocity sports speed gun	99.99

BUTTERNUT (BUT)

Skyhawk 3X10	Inband 10 el, 24' beam w/bauln *	\$999.99
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*Skyhawk 3X10 is drop-shipped (shipped direct to you from the Butternut factory). On factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Wood Dale, Illinois via UPS, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on this special order item.

HF-6VX	80/40/30/20/15/10m 26' vert ant	349.99
HF-9VX	80/40/30/20/17/15/12/10/6m 26' vert	399.99
A17-12	17 & 12m kit for HF-6VX	65.99
CPK	Counterpoise kit	139.99
MPS	Mounting post sleeve	12.99
RMK-II	Roof mounting kit w/radials	169.99
STR-II	Radial kit only	129.99
TBR-160S	160m resonator	129.99
HF-2V	80/40m 32' vertical	269.99
30-MRK	30m resonator for HF-2V	109.99
TBR-160S	160m resonator	129.99

CQ (CQX)

Building and Using Baluns and Ununs	\$ 19.99
HR Anthology - Homebrewing Techniques	19.99
Lew McCoy on Antennas	15.99
Shortwave Propagation Handbook	19.99
W6SAI HF Antenna Handbook	19.99

CSS (CSS)

Pactern 98	Win software; Kantronics TNCs	\$ 79.99
PK-Term 99	Win terminal prog; PK-12/96/232	79.99

CABLE X-PERTS (CAB)

CXP1318FX	CXP1318FX (low loss, flexible) per ft.	\$.59
CXP1318FX	500 ft. Roll	269.99
CXP1318FC-3	3' CXP1318FX/silver teflon PL259s	14.99
CXP1318FC-50	50' CXP1318FX/silver teflon PL259s	48.99
CXP1318FC-75	75' CXP1318FX/silver teflon PL259s	67.99
CXP1318FC-100	100' CXP1318FX/silver teflon PL259s	84.99
CXP1318FC-150	150' CXP1318FX/silver teflon PL259s	121.99
CXP1318FN-3	3' CXP1318FX/type N males	19.99
CXP1318FN-75	75' CXP1318FX/type N males	81.99

Cbl Xperts - continued

CXP1318FN-100	100' CXP1318FX/type N males	98.99
CXP1318FN-125	125' CXP1318FX/type N males	116.99
CXP008C-3	3' RG8 foam/silver teflon PL259s	12.99
CXP008C-6	6' RG8 foam/silver teflon PL259s	14.99
CXP008C-25	25' RG8 foam/silver teflon PL259s	25.99
CXP008C-50	50' RG8 foam/silver teflon PL259s	37.99
CXP008C-75	75' RG8 foam/silver teflon PL259s	49.99
CXP008C-100	100' RG8 foam/silver teflon PL259s	61.99
CXP008C-125	125' RG8 foam/silver teflon PL259s	77.99
CXP213C-6	6' RG213/silver teflon PL259s	14.99
CXP213C-15	15' RG213/silver teflon PL259s	22.99
CXP213C-25	25' RG213/silver teflon PL259s	25.99
CXP213C-50	50' RG213/silver teflon PL259s	37.99
CXP213C-75	75' RG213/silver teflon PL259s	49.99
CXP213C-100	100' RG213/silver teflon PL259s	61.99
CXP08XC-3	3' RG8X clear/silver teflon PL259s	11.99
CXP08XC-25	25' RG8X/silver teflon PL259s	18.99
CXP08XC-50	50' RG8X/silver teflon PL259s	24.99
CXP08XC-75	75' RG8X/silver teflon PL259s	28.99
CXP08XC-100	100' RG8X/silver teflon PL259s	32.99
CXP058ARBS-3	3' RG58/BNC male-SO-239	15.99
CXP142SBJ-3	3' RG142/SMA male-BNC female	19.99
CXP08XC-3	3' RG8X/male BNCs	13.99
CXP08XC-6	6' RG8X/male BNCs	14.99
CXP16RSSD-3	3' RG316/SMA male-SO-239	19.99
CXP522-6	6' keyer hook-up cable w/S-267 plug	19.99
235	1" tinned copper ground braid	...per ft. .99
235	100 ft. Roll	92.99
2332	1/2" tinned copper ground braid	...per ft. .59
2332	100 ft. Roll	52.99
AZ-10	10ga red/black DC power cord	...per ft. .39
AZ-10	100 ft. Roll	29.99
AZ-12	12ga red/black DC power cord	...per ft. .29
AZ-12	100 ft. Roll	19.99

CASTLE RIDGE (CRO)**SOLID COPPERWELD ANTENNA WIRE**

AN-122	100 feet No. 12	\$ 29.99
AN-123	150 feet No. 12	39.99
AN-124	250 feet No. 12	59.99
AN-126	500 feet No. 12	99.99
AN-128	1000 feet No. 12	179.99
AN-142	100 feet No. 14	24.99
AN-143	150 feet No. 14	29.99
AN-144	250 feet No. 14	39.99
AN-146	500 feet No. 14	69.99
AN-148	1000 feet No. 14	119.99
AN-181	250 feet No. 18	17.99
AN-182	500 feet No. 18	29.99

CELESTRON (CEL)

4020	40x dissecting microscope	\$ 79.99
4030	40-500x educational microscope	119.99
4050	40/100/400x biological microscope	199.99
10110	StarHopper 10 Dobsonian telescope	549.99
10112	StarHopper 12 Dobsonian telescope	999.99
10800	StarHopper 8 Dobsonian telescope	399.99
10105	Celestar 8 telescope	999.99
94162	Solar filter for Nexstar 8/Celestar 8	79.99
11022	NexStar 8i telescope/tripod/hand control	1379.99
93501	Heavy duty tripod	299.99
93593	Standard tripod for NexStar 8i	99.99
93963	GPS module - CN16	199.99
11033	NexStar 5i telescope	899.99
93497	Standard tripod	149.99
93962	NexStar hand control	149.99
93963	GPS module - CN16	199.99
11052	Nexstar 8 GPS telescope	2169.99
11053	NexStar 11 GPS telescope	3224.99
21016	C-4R refractor telescope	399.99

Celestron - continued AES Price

21019 C-6R refractor telescope	849.99
21052 FirstScope 60AZ refractor telescope	99.99
21086 FirstScope 80EQ refractor telescope	299.99
94135 Solar filter for FirstScope 80EQ/WA	34.99
22062 NexStar 60GT telescope	249.99
22082 NexStar 80GT telescope	349.99
302160 Soft case for Nexstar 60/80	59.99
94135 Solar filter for Nexstar 60GT/80GT	34.99
31034 Tabletop 76 reflector telescope	99.99
31044 FirstScope 114 4.5" reflector telescope	249.99
31056 C-6N reflector telescope	399.99
31132 NexStar 130GT refractor telescope	399.99
31142 NexStar 114GT reflector telescope	439.99
52200 60mm pro zoom spotting scope	199.99
52211 60mm wildlife zoom spotting scope/tripod	169.99

LENSES (not for 10110, 10112, 31034)

93318 1.25" 9mm Omni lens	\$ 49.99
93320 1.25" 15mm Omni lens	49.99
93326 1.25" 2x Omni Barlow lens	59.99
93351 1.25" 7.5mm Ulima lens	129.99
93352 1.25" 12.5mm Ulima lens	129.99
93353 1.25" 18mm Ulima lens	129.99
93387 1.25" 5mm X-Cel lens	89.99
93389 1.25" 10mm X-Cel lens	89.99
93391 1.25" 18mm X-Cel lens	89.99
93507 1.25" 2x deluxe Barlow lens	D 59.99
94303 Plossl lens/filter kit w/carrying case	199.99

51630 Star pointer finderscope	30.99
93590 Red Astro Lite flashlight	5.99
93700 CD-ROM "The Sky for Celestron"	29.99
93720-40 Planisphere & planet finder	D 6.99
93722 Sky Map	19.99
94108 Diagonal, erect image 90°	49.99
94119-A 1.25" moon filter	15.99
94119-10 Eyepiece filter set (21/80/ND13/polarizing)	49.99
94126-A Model A LPR filter, for 1¼" eyepieces	69.99

Sorry, no exports on Celestron products.

Channel Master (CHA)

9521A Prog light duty rotor/IR rem cont/3-wire	\$ 99.99
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CLOCKS

BMI 972AD 14" 12/24-hour wall clock	\$ 27.99
BMI 973A 12" 24-hour wall clock	49.99
MFJ 105C 24-hour quartz wall clock	19.99
MFJ 107B 24-hour digital clock	9.99
MFJ 108B 24/12-hour dual disp digital clock	19.99
MFJ 112B Deluxe world map clock	24.99
MFJ 113 24/12-hr 1.8" LED clock/batt back-up	19.99
MFJ 115 DX'er 24-hr analog world wall clock	24.99
MFJ 116DC 12-hour 12vdc LED clock	Δ 9.99
MFJ 118 Giant 24/12 hour LCD clock	24.99
MFJ 123 Eternity solar atomic clock	79.99
MFJ 125 Calendar 24-hour analog wall clock	29.99
ORE RM-116E Exactset radio controlled clock	D 29.99

COAX SEAL (UNV)

104 ½" x 60" coax seal	\$ 3.99
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Coaxial Dynamics (COA)

81000-A Wattmeter w/SO-239s	\$260.99
83000-A Peak reading wattmeter w/SO-239s	393.99
82004 50w 2-30MHz element	87.99
82005 100w 2-30MHz element	87.99
82006 250w 2-30MHz element	87.99
82007 500w 2-30MHz element	87.99
82008 1000w 2-30MHz element	87.99
82009 2500w 2-30MHz element	125.99
82010 5000w 2-30MHz element	125.99
82013 10w 25-60MHz element	71.99
82014 25w 25-60MHz element	71.99
82015 50w 25-60MHz element	71.99

Coaxial Dyn - continued AES Price

82016 100w 25-60MHz element	71.99
82029 10w 100-250MHz element	71.99
82031 50w 100-250MHz element	71.99
82033 250w 100-250MHz element	71.99
82046 10w 400-1000MHz element	71.99
82048 50w 400-1000MHz element	71.99
82049 100w 400-1000MHz element	71.99
88000 N female quick match connector each	9.99
88800 Carrying case for meter	65.99

COBRA (COB)

190X III AM Mobile CB	\$ 49.99
19LTD II AM Mobile CB	54.99
20XTR AM Mobile CB w/neon magnetic ant	79.99
21LTD ST Sound Tracker AM Mobile CB	D 69.99
25LTD (25LTD Classic) AM Mobile CB	89.99
25WXXW ST Night Watch Sound Tracker AM/Mob CBWX	109.99
29LTD (29LTD Classic) AM Mobile CB	99.99
29NW Night Watch AM Mobile CB	119.99
29WXXW ST Night Watch Sound Tracker AM/Mob CBWX	129.99
75WV ST Sound Tracker AM Mobile CB w/WX	99.99
148NW ST Night Watch Sound Tracker SB/AM Mob CB	179.99
HH-37 ST Sound Tracker handheld CB	59.99
HH-Road Trip Sound Tracker HH/CB/WX/mag ant	79.99
HGA-1000 Magnet mt CB antenna	19.99
HGM-77 Noise canx/amplified mobile mic	24.99
PR-3000-2DX 22ch 2w GMRS/FRS HH	79.99

COMET (CMT)

SWR/POWER METER

CMX-1 1.8-60MHz 2kw remote SWR/pwr meter	\$199.99
EKS-3 Optional 10' extension cable for CMX-1	28.99

MOBILE ANTENNAS

B-10 2m/440 2.15db 12" cell look-alike ant	\$ 42.99
B-10NMO 2m/440 2.15db 12" cell look-alike NMO	42.99
C-757 2m/440 2.15/5.5db 38" foldover ant	59.99
C-757NMO 2m/440 2.15/5.5db 38" foldover NMO	59.99
C-767 2m/440 3.5/6db 40" foldover ant	64.99
C-767NMO 2m/440 3.5/6db 40" foldover NMO	64.99
CA-2X4SR 2m/440 3.8/6.2db 40" mob ant	69.99
HA-050 6m 33" ¼ wave mobile antenna	72.99
HP-32 2m/440 3/5.5db 34" 350/250w ant	89.99
M-24M 2m/440 1.7/4.1db mag ant w/BNC	39.99
M-24M 2m/440 1.7/4.1db mag ant w/PL259	39.99
SB-1 2m/440 1.5/2.15db 16" flex mobile	42.99
SB-1NMO 2m/440 1.5/2.15db 16" flex NMO	42.99
SB-2 2m/440 2.15/3.8db 18" black mobile	42.99
SB-2NMO 2m/440 2.15/3.8db 18" blk NMO	42.99
SB-5 2m/440 3/5.5db 38" black mobile ant	58.99
SB-5NMO 2m/440 3/5.5db 38" black NMO	58.99
SB-7 2m/440 4.5/7.2db 4" 7" black mob ant	79.99
SB-7NMO 2m/440 4.5/7.2db 4" 7" blk NMO	79.99
SB-14 6m/2m/440 43" chrome mobile ant	67.99
SB-15 6m/2m/440 2.15/4.5/7.2db 5" chr mob	84.99
SB-25 2m 4.1db black mobile antenna	48.99
SB-25NMO 2m 4.1db black NMO mob ant	48.99
SB-97 2m/440/1.2 3/6.8/9.6db 39" type N	84.99
SB-123 1.2GHz 7.2db 24" type N mobile ant	54.99
SB-224 2m/220/440 2.15/3.2/5.5 blk mob	78.99
SB-224NMO 2m/220/440 2.15/3.2/5.5 blk NMO	78.99
SF-245 2.4 GHz 7db 18" fg type N ant	D 59.99
SF-245SPR 2.4GHz 7db 18" fg N ant/spring	69.99
UHV-4 10/6/2/440 54" mobile ant; FT8900R	109.99
UHV-6 40/15/10/6/2m/440 7" 2" mobile ant	159.99
L-3.5 80m loading coil for UHV-6	34.99
L-14 20m loading coil for UHV-6/CA-HV	29.99
L-18 17m loading coil for UHV-6/CA-HV	29.99
Z-750 2/440 2.15/5.5db 39" theft resistant	D 59.99

MOBILE MOUNTS

304M Mobile mt, 13" coax w/UHF connectors	\$ 26.99
304N Mobile mt, 13" coax w/type N	26.99

Comet - continued AES Price

305M Mobile mt, 16.5" coax w/UHF connectors	28.99
504N Roof mount, 13" coax w/type N	34.99
AD-10N NMO mount to female N adapter	17.99
AD-15N NMO mount to SO-239 adapter	17.99
AD-25M SO-239 to NMO mount adapter	14.99
AD-35 ¾-24 stud to UHF mobile mt adapter	19.99
CK-3M Dlx 2-step 10" cable w/UHF connectors	35.99
CK-3M5 Dlx 2-step 16.5" cable w/UHF connects	42.99
CK-5N Dlx 13" cable assembly w/type N	49.99
CM-5M Hvy duty mag mt, coax, max 4" ant	24.99
CP-5-3/8-24 HD ¾-24 mt (RS-730) w/16.5" coax	69.99
CP-5M Hvy duty UHF mt (RS-730) w/16.5" coax	69.99
CP-5NMO Hvy duty NMO mt (RS-730) w/16.5" coax	69.99
CQ-5M Dlx black QD trunk lip mt/17" coax	D 66.99
CQ-5N Dlx black QD trunk lip mt/17" coax/N	D 44.99
CR-5M Std coax assy, 16.5" coax, UHF conn	19.99
CT-5M Trunk lip mount w/16.5" coax	39.99
GR-5M Dlx trnk lip mt w/coax; matches SB D	59.99
GRB-5M Deluxe black trunk lip mt w/coax	69.99
RS-9 Trunk lip mount, no coax	11.99
RS-520 Mini heavy duty trunk/hatch mount	28.99
RS-560C Luggage rack mount, no coax	37.99
RS-720 Hatch/rear door/trnk multi-adj mt	29.99
RS-720NMO Hch/rear door/trnk multi-adj NMO mt	29.99
RS-730 HD rear van/SUV door/trnk w/UHF mt, no coax	32.99
WS-1M Window clip mt w/UHF connectors	66.99

BASE STATION ANTENNAS

CA-712EF 440 9db 10' 5" base antenna	\$109.99
CA-ABC22A 2m 6.5db 9' 5" base/rptr ant	75.99
CA-ABC23 2m 7.8 db 13' 4" base/rptr ant	109.99
CA-F726F 440-470 6db 3' 6" tunable ant	109.99
CA-5HB4 6m 4 el 10.4db 10' 6" boom beam	129.99
CA-333 2m/220/440 6.5/7.8/9db 10.25" ant	184.99
CYA-1216E 1.2GHz 16el 16.6db 4' 5" Bm N beam	129.99
DS-150S 6m/2m/440/900/1.2 disc/60" coax	99.99
GH-50 6m 2.15db 7' 10" fg base antenna	99.99
GP-3 2m/440 4.5/7.2db 5' 11" base/rptr ant	99.99
GP-6 2m/440 6.5/9db 10' 2" base/rptr ant	159.99
GP-9 2m/440 8.5/11.9db 17' 8" base/rptr	199.99
GP-9N 2m/440 8.5/11.9db 17' 8" N base/rptr	199.99
GP-15 6m/2m/440 3/6.2/8.6db 7' 11" base	169.99
GP-21/CA-1221S 1.2 14.8db 8" N base/rptr	159.99
GP-24 2.4GHz 12.4db 5' 11" N base/rptr	169.99
GP-24S 2.4GHz 9.9db 3' 7" N base/rptr	Δ 89.99
GP-88 2m/440/1.2 6.5/9/13.5db 9' 8" N ant	199.99
KP-20 900 MHz 9.2db 7' 4" type N base/rptr	112.99
PYA-913 900MHz 13el 15.8db 4' 8" type N beam	139.99

DUPLEXERS AND TRIPLEXERS

CF-142 1.3-150/200-480 600/400w UHF/leads	\$ 69.99
CF-360A 1.3-30/50-470 600w UHF w/leads	69.99
CF-360B 1.3-30/50-470 600w UHF/common lead	69.99
CF-416A 2m/440 800/500w UHF w/leads	49.99
CF-416B 2m/440 800/500w UHF/N w/leads	49.99
CF-416C 2m/440 800/500w N/UHF/N leads	54.99
CF-416W 1.3-250/400-1400 400/200w N/leads	69.99
CF-530 1.3-90/125-470 600w UHF w/leads	74.99
CF-530C Backwards duplexer for FT-8900R	69.99
CF-706A 1.3-56/75-470 350w UHF w/leads	74.99
CF-4160I 2m/440 800/500w UHF/UHF, no leads	48.99
CF-4160J 2m/440 800/500w SO239, no leads	53.99
CF-4160K 2m/440 800/500w all UHF, no leads	48.99
CFX-324A 2m/220/440 600w UHF w/leads	88.99
CFX-324B 2m/220/440 600w UHF, no leads	85.99
CFX-514 HF/2m/440 800/800/500w UHF w/leads	79.99
CFX-514J HF/2m/440 800/800/500w UHF, no leads	74.99
CFX-514N HF/2m/440 800/800/500w UHF/N w/leads	79.99
CFX-4310C 1.3-150/440/1.2 triplexer, no leads	79.99
CFX-5140 HF/6m/2m/440 800/800/500w UHF, no leads	74.99

HT & HANDHELD SCANNER ANTENNAS

BNC-24 2m/440 17" 2.15/5.3db BNC whip	\$ 24.99
CH-32 2m/440 1.75" BNC Miracle Baby ant	29.99

Comet - continued**AES Price**

CH-75 2m/440 0/3.2db 14.75" BNC ant	25.99
HB-05 18" BNC female - SMA male adapter/cbl	14.99
HM-05 18" BNC male - SO-239 adapter/cable	14.99
HS-05 18" SMA male - SO-239 adapter/cable	14.99
HT-224 2m/220/440 11" SMA antenna	47.99
SH-55 2m/440 1.5/3.2db 15" BNC ant	33.99
SH-95 2m/440 1.2 1.5/2.15/5.5db BNC ant	34.99
SMA-3 2m/440 1.2/1.7db 9.75" SMA ant	39.99
SMA-24 2m/440 17" 2.15/5.3db SMA whip	24.99
SMA-501 2m/440/900 1.5" SMA antenna	29.99
SMA-503 2m/440 8.75" SMA antenna	29.99
SMA-703 2m/440/1.2GHz 6.5" SMA ant	31.99

Comm Outfitters

(COF)

EXP-1 Expedition Pack for Yaesu FT-817	\$ 99.99
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COMM-SPEC (COM)

ID-8 Automatic morse station identifier	\$ 69.99
SS-64 64-tone mini prog CTCSS encoder	28.99
TE-32 32-tone CTCSS prog encoder box	49.99
TS-64DS 64-tone CTCSS prog encoder/decoder	57.99

CONNECTORS**AMPHENOL COAX CONNECTORS (AMP)**

83-1SP-1050 Male coax plug (PL-259)	\$ 1.99
83-1SP Silver plated coax plug (PL-259)	2.99
Van Gorden (VAN) silver plated teflon PL-259	2.99
83-185-RFX Reducer for RG-58 (UG-175) .....	.99
83-168-RFX Reducer; RG-59/RG-8X (UG-176) .....	.99
83-1AP Right angle adaptor (UG-646)	8.99
83-1J Double female adaptor (PL-258)	6.99
83-1R Female chassis mt socket (SO-239)	3.99
83-1H Hood; in-line use w/83-1R (UG-106) Δ	1.49
83-1T T-connector adaptor (M-358)	11.99
83-77 Double male adaptor	12.99
83-878 Single hole 3/4" chassis socket	2.99
31-002 BNC male connector for RG-58	4.99
31-012 BNC male connector; RG-59/RG-8X	7.99
31-221 BNC female chassis socket	2.99
82-24 Type N female chassis mt socket	7.99
82-61 Type N male connector for RG-8	6.99
82-64 Type N right angle adaptor	14.99
(VAN) N connector Type N connector for 9913	4.99
82-202-1006 Type N male; 8214/9913/9913F	7.99
82-209 Type N female in-line for RG-8	9.99
34025 Type N male connector for RG-58	8.99

AMPHENOL COAX ADAPTORS (AMP)

2900 SO-239 to BNC male adaptor	\$ 14.99
4400 SO-239 to type N male adaptor	14.99
31-28 BNC female to PL-259 adaptor	16.99
(HOU) SMA-872 SO-239 to SMA plug adaptor	5.99

AIM CONNECTORS, PLUGS & ADAPTORS (AIM)

(PHI) 61-608B 8-pin female mic plug	\$ 4.99
25-7351 Chassis mt SO-239 double female	3.99
25-7365 BNC female to SO-239	3.99
25-7420 BNC male to SO-239	2.99
26-8010 Type N double female	3.99
26-8011 Type N chassis mount	2.99
26-8015 N male to SO-239	4.99
26-8016 BNC female to N male	4.99
26-8017 BNC male to N female	4.99
27-8120 BNC female to PL-259	2.99
27-8130 BNC double male	3.99
27-8140 BNC T; 2 female, 1 male	2.99
27-8142 BNC T, 3 male .....	.49
27-8450 BNC chassis mt, 4 screw holes .....	.49
27-8460 3/4" hole BNC chassis mt .....	.49
27-8470 Dual BNC chassis mount	3.99
29-3855 BNC female to SMA male	3.99
29-4140 SO-239 to mini PL-259	2.99

VANCO MICROPHONE CONNECTORS (VCO)

CBC-2P Panel mt 2-pin male	\$.09
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Connectors - continued AES Price

CBC-3 3-pin female mic plug	Δ .49
CBC-3P Panel mt 3-pin male	Δ .09
CBC-4 4-pin female mic plug	4.99
CBC-5 5-pin female mic plug	3.99
CBC-5P Panel mount 5-pin male	Δ .09
CBC-6 6-pin female mic plug	4.99
(AIM) 19-1289 8-pin female mic plug	4.99
CBC-8P Panel mt 8-pin male	5.99

KENWOOD DIN PLUGS (KEN)

7-pin DIN plug	\$ 4.99
8-pin DIN plug	6.99
13-pin DIN plug	9.99

VANCO Mic Holders/Mini Plugs/Cig Plugs (VCO)

MH-1 Magnetic mic holder	\$ 1.69
MH-2 Regular mic holder	1.49
P-35 3.5mm miniature phone plug .....	.69

Connect Systems (CSY)

CS-800 Full duplex patch & repeater controller	\$369.99
CS-900 Simplex interconnect	369.99

CROSS DEVICE (CRS)

STUF Coax connector waterproofing filler	\$ 4.99
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CUSHCRAFT (CUS)

At Cushcraft's request, amateur radio dealers are not authorized warranty depots for Cushcraft Antennas. All warranty issues should be directed to the Technical Support Department/Warranty at Cushcraft (803) 627-7877.

VHF/UHF FM BEAMS* (Vertical polarization)

A148-3S 2m, 3 el wideband beam, 7.8db	\$ 69.99
A148-10S 2m, 10 el wideband beam, 13.2db	109.99
A449-6S 440 MHz, 6 el, 3' boom, 10 db	66.99
A449-11S 440 MHz, 11 el, 4.5' boom, 13 db	89.99

*Antennas can be mounted vertically or horizontally!

2M/440 FM BEAMS* (Vertical polarization)

A270-6S 2m/440, 3/3 el, 2.8' boom, 7.8 db	\$ 89.99
A270-10S 2m/440, 5/5 el, 6.17' boom, 10 db	109.99

*Antennas can be mounted vertically or horizontally!

TRI-BAND 6M/2M/440 BEAMS

AE270-13S 6m/2m/440, 3/5/5el, 8.66db, 8/10/10db	\$199.99
ASL-670 50-450MHz 14el 6.7' boom 6db LP	269.99

FM RINGOS - 1/2 Wave Verticals

AR-10 10m FM Ringo, 17.6', 3db, 1000w	\$ 89.99
AR-6 6m FM Ringo, 10.1', 3db, 1000w	89.99
AR-2 2m FM Ringo, 3.9', 3db, 1000w	54.99
AR-450 440MHz FM Ringo, 1.4', 3db, 500w	40.99

RINGO RANGERS - FM Verticals

ARX-2 2m FM Ringo Ranger	\$ 64.99
ARX-2B 2m FM Ringo Ranger II, 14', 7db, 1000w	74.99
ARX-220B 220 FM Ringo Ranger II, 9.3', 7db, 500w	74.99
ARX-450B 440FM Ringo Ranger II, 4.9', 7db, 500w	74.99

DUAL-BAND 2M/440 FM RINGOS

AR-270 2m/440MHz FM, 3.75', 3.7/5.5db, 250w	\$104.99
AR-270B 2m/440 MHz FM, 7.7', 5.5/7.5db, 250w	109.99

TWIST, OSCAR BEAMS (Horiz/Vert Polarization)

A148-20T 2m 20el 10.8'bm 11.1db twist	\$154.99
719B 432 19 el 13.5' boom 15.5db	169.99

BOOMER ANTENNAS

124WB 2m Boomer, 4 el, 4' boom, 10.2 db	\$ 99.99
13B2 2m Boomer, 13 el, 15' boom, 15.8 db	169.99
17B2 2m Boomer, 17 el, 31' boom, 18 db	269.99
26B2 2 13B2s vertically stacked	449.99

Cushcraft - continued AES Price

224WB 220 Boomer, 4 el, 3' boom, 10.2db	79.99
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BOOMER POWER DIVIDERS

PD-2 Power divider for 2 13B2s	\$ 71.99
PD-4 Power divider for 4 13B2s	84.99

VHF/UHF BEAMS* (Horizontal polarization)

A40-3S 6m, 3 el, 6' boom, 8 db, stainless hdwre	\$124.99
A50-5S 6m, 5 el, 12' boom, 10 db, stainless hdwre	189.99
A50-6S 6m, 6 el, 20' boom, 11db, stainless hdwre	299.99
A148-10S 2m, 10 el wideband beam	109.99
A430-11S 430 MHz, 11 el, 4' boom, 13 db	89.99

*Antennas can be mounted vertically or horizontally!

MOBILE ANTENNAS

CS-28M 10m magnet mt antenna	\$ 59.99
CS-50M 6m magnet mt 3 db antenna	59.99
CS-147A 2m coil & whip only	39.99
CS-147M 2m magnet mt 3 db antenna	59.99
CS-220M 220 magnet mt 3 db antenna	59.99
CS-450M 440 magnet mt 5 db antenna	59.99

DUAL-BAND 2M/440 MOBILE ANTENNAS

CS-270A 2m/440 coil & whip only	\$ 59.99
CS-270M 2m/440 3.7/6 db magnet mt ant	84.99

MOUNTS ONLY FOR MOBILE ANTENNAS

CS-MG Magnetic mount	\$ 29.99
CS-MGN Magnetic mount w/N connector	34.99
CS-TL Trunk lip mount	29.99

MULTIBAND HF VERTICAL ANTENNAS

MA-5V 20/17/15/12/10m 14.7' vertical ant	\$219.99
MA-6V 20/17/15/12/10/6m 14.7' vertical ant	259.99
R-6000 20/17/15/12/10/6m 19' vertical	329.99
R-8 40/30/20/17/15/12/10/6m 28.5' vert	489.99
R-86K Guy kit for R-8	49.99

ROTATABLE HF DIPOLES

D-3 20/15/10m World Ranger dipole	\$259.99
D-3W 30/17/12m rotatable dipole	259.99
D-4 40/20/15/10m World Ranger dipole	369.99
D-40 40m World Ranger dipole	319.99

BIG THUNDER HF TRI-BAND BEAM

X-7 20/15/10m, 7 el, 18' boom, 12.5/13db	\$669.99
X-740 40m add-on kit for X-7	299.99

BIG THUNDER HF MONOBAND BEAM

XM-240 40m, 2 el, 23' boom, 7 db	\$719.99
TEN-3 10m, 3 el, 8' boom, 8 db	199.99

MULTIBAND HF BEAM ANTENNAS

A-3S 20/15/10m, 3el, 14'bm, 8db, stainless hdwr	\$449.99
A-743 40m or 10 MHz add-on kit; A-3/A-3S	179.99
A-4S 20/15/10m, 4el, 18'bm, 8.9db, stainless hdwre	549.99
A-744 40m or 10 MHz add-on kit; A-4/A-4S	179.99
A-3WS 17 & 12m, 3 el, 14' boom, 8 db	369.99
A-103 30m add-on kit for A-3WS	179.99
ASL-2010 13.5-32MHz 8el 18' bm 6.4db LP	749.99
MA-5B 20/17/15/12/10m 7.3' boom mini beam	349.99

LIGHTNING ARRESTORS

LAC-4 200w SO-239 gas tube arrestor	\$ 49.99
LAC-4H 2kw SO-239 gas tube arrestor	54.99
LAC-4N 200w type N gas tube arrestor	59.99
LAC-4NH 2kw type N gas tube arrestor	64.99
LC-2 Extra 200w cartridge for LAC-4/4N	15.99
LC-2KW Extra 2kw cartridge for LAC-4H/4NH	17.99

5VB Vinyl connector boots

pack of 5	15.99
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DCI (DCI)

145-2H 2m 144-146MHz 200w bandpass filter	\$ 99.99
146-4H 2m 144-148MHz 200w bandpass filter	99.99
223-5-3H 222-225MHz 200w bandpass filter	109.99

2m/220 models w/N connectors add \$10 special order

435-10C 430-440MHz 200w N bandpass filt	119.99
445-10C 440-450MHz 200w N bandpass filt	119.99
146/444-DB 144-148/438-450 200w bp filter	169.99

AES Price

DC SALES (DCS)

Tenna Hitch 3/4-24 trailer hitch antenna mt D \$ 38.99

DAIWA (DAI)

CN-101 1.8-150/150/1.5kw SWR/pwr meter/light \$ 99.99
CN-103M 140-525/20/200w SWR/power meter 99.99
CN-801H 1.8-200/20/200kw SWR/pwr meter 149.99
CN-801B 140-525/20/200w SWR/power meter 154.99
CS-201 2-position 600 MHz coax switch 26.99

DAVIS (DAV)

6150 Wireless Vantage Pro weather station .. \$539.99
7400 Perception II indoor WX unit 139.99
7425 Wizard III weather station 179.99
7440 Monitor II weather station 269.99
7852 Rain Collector II, 0.01" 69.99
7977 Electronic rain counter, 0.01"D 21.99
7859 External temp/humd Sensor II; 7440 119.99
7862 Weatherlink Win interface/software... 149.99
7866 Weatherlink Mac interface/software...D 99.99
7870 Modem adapter for 7862/7866Δ 99
7867 Weatherlink Mac to Win conv kitD 99
7868 Weatherlink Win to Mac conv kitD 99
7873 Cig lighter power cord 10.99
7876-040 4-conductor 40' extension cable 18.99
7878-040 6-conductor 40' extension cable 22.99
7880 8-conductor 25' junction box cable Δ 4.99
7881 8-conductor 50' junction box cable 25.99
7882 8-conductor 100' junction box cable 45.99
7890 Mast mount for anemometer 14.99
0131 Weather forecasting guide reference card 9.99
0271 Turbo Meter handheld dig wind indicator Δ 79.99
0276 WindScribe electronic wind/temp indicator 99.99
0281 Wind Watch handheld wind indicator .. 47.99

DIAMOND (DIA)

SWR/POWER METERS

SK-20C HF/6m/2m 30/300w meter \$ 89.99
SK-40C 144-470 (220 w/correction) 15/150w 79.99
SK-100 1.6-60 MHz 30/300/3kw PEP meter .. 134.99
SK-200 1.8-200 MHz 5/20/200w PEP meter .. 94.99
SK-400 140-525 MHz 5/20/200w PEP meter .. 114.99
SK-600 Dual band 1.8-160/140-525 200w PEP mtr 169.99
SK-1000 1.8-160/430-1300MHz 200w PEP meter 214.99

HT & HANDHELD SCANNER ANTENNAS

RH-3 2m/440 1.75" BNC mini HT duck \$ 24.99
RH-77CA 2m/440 15" SMA rubber gain ant .. 24.99
RH-205 2m 3/4 wave telescopic HT antenna ... 24.99
RH-519 2m/440 8.3" flexible BNC whip 27.99
RH-707 2m/440 8 1/4" tiltable BNC whip 33.99
RH-951S 2m/440/1.2GHz 15" BNC slim duck 44.99
SRH-77CA 2m/440 15" SMA rubber gain ant 24.99
SRH-320A 2m/220/440 flexible SMA whip ... 49.99
SRH-519 2m/440 8.3" flexible SMA whip 32.99
SRH-805 2m/440/1.2GHz 1.75" SMA ant 27.99
SRH-815 2m/440/1.2GHz 6" flex SMA whip .. 36.99
SRH-999 6m/2m/440/1.2GHz 20" SMA whip . 59.99

MONO-BAND MOBILE ANTENNAS

HF-6FX 6m 2.15db 44" mobile antenna \$ 69.99
HF-50CX 6m 3.5db 71" mobile antenna 99.99
M-285 2m 3.4db 52.4" mobile antenna 31.99
M-685 6m 2.15db 52.4" mobile antenna 31.99
MG-200 2.4GHz 7db 23.6" N mobile ant 99.99
NR-22L 2m 6.5db 96.8" mobile antenna 69.99
NR-124 1.2GHz 8.4db 25" N mobile antenna 64.99
SG-2000HD 2m 5.2db 62.6" 250w mob ant .. 89.99

DUAL-BAND MOBILE ANTENNAS

MR-77 2m/440 2.15/3.4db 20" magnetic ant \$ 39.99
MR-77SMA 2m/440 2.15/3.4db 20" mag w/SMA 44.99
NR-72BNMO Black 2m/440 2.15db 14" NMO 41.99
NR-73BNMO Blk 2m/440 2.15/5.5db 34" NMO 57.99

Diamond - continued

NR-770HA 2m/440 3/5.5db 40" mobile ant .. 56.99
NR-770HB Black 2m/440 3/5.5db 40" mobile 59.99
NR-770HMO 2m/440 3/5.5db 40" NMO mobile 56.99
NR-770HBNMO Blk 2m/440 3/5.5db 40" NMO 59.99
NR-770RA 2m/440 3/5.5db 39" mobile ant ... 51.99
NR-7900A 2m/440 3/7.6db 57" hi pwr mob ant 89.99
SG-M510 2m/440 2.15/5.5db 37" mob ant ... 59.99
SG-7000A 2m/440 2.15/3.8db 19" mobile 69.99
SG-7500A 2m/440 3.5/6db 41" mobile ant ... 79.99
SG-7500NMO 2m/440 3.5/6db 41" NMO ant ... 79.99
SG-7900A 2m/440 5/7.6db 62" mobile ant ... 114.99
SG-7900ANMO 2m/440 5/7.6db 60" NMO ant 114.99
K-400CNMO Hatch/trnk mt/coax; SG7900ANMO 69.99

TRI-BAND MOBILE ANTENNAS

CR-320A 2m/220/440 2.15/3.8/5.5db 36" \$ 89.99
CR-627B 6m/2m/440 2.15/4.5/7.2db 60" ant 99.99
CR-627BNMO 6m/2m/440 2.15/4.5/7.2db 60" 99.99
HV-7A 10/6/2m/440 54" UHF mount mobile ant 109.99
HVC-7 40m loading coil for HV-7A/MV-3A 44.99
HVC-14 20m loading coil for HV-7A/MV-3A 37.99
HVC-18 17m loading coil for HV-7A/MV-3A 37.99
HVC-21 15m loading coil for HV-7A/MV-3A 37.99
NR-2000NA 2m/440/1.2 3.15/6.3/9.7db 37" N mob 89.99
SG-M911 6m/2m/440 2.15/3/5.8db 41" mob 69.99

QUAD-BAND MOBILE ANTENNA

CR-890DA 10m/6m/2m/440 0/0/2.15/5.5db 50" \$ 99.99

MAGNET MOUNTS

DPK-4NM-N Hvy duty mag mt, cbl, N, 45" max \$ 49.99
K-702M Hvy duty mag mt, 6 1/2" dia, 50" max 49.99
SPM-35 Hvy duty mag mt, cable, 45" max 39.99
SPM-NMO Hvy duty NMO mag mt, cbl, 45" max 44.99

TRUNK LIP MOUNTING KITS

K-200KM Folding hch/trnk mt/coax; NR/SG ..D \$ 39.99
K-400 Hatch/trunk mt; NR/SG antennas 39.99
K-400C Hatch/trnk mt w/coax; UHF mount .. 69.99
K-400CNMO Hatch/trunk mt w/coax; NMO mt 69.99
K-400DS Hatch/trunk mt w/coax; UHF mt/SMA 79.99
K-400SMA Hatch/trunk mt w/coax; NMO/SMA 79.99
K-400-3/BC Trunk mount w/6.5" cable; 3/4-24 69.99
K-412C Light duty hatch/trnk mt w/coax; UHF mt 59.99
K-412CNMO Light duty hatch/trnk mt w/coax; NMO 59.99
K-412S Light duty hatch/trnk mt w/coax; UHF/SMA 69.99
K-412SNMO Lt duty hatch/trnk mt/coax; NMO/SMA 69.99
K-110 10' extension cable for K-412 mts .. 14.99
K-600M Tilt angle SO-239 trunk mt w/cable .. 57.99
K-600S Tilt angle SO-239 trnk mt w/cable/SMA 57.99
K-601M SO-239 hideaway trunk mt, 6' coax .. 69.99
K-601NMO NMO hideaway trunk mt, 6' coax .. 69.99
C-110 10' extension cable for K-601 mts .. 14.99
K-604M Tilt angle trunk mt w/flexible cable D 57.99
K-9000LRM Motorized luggage rack mount ... 109.99
K-9000TMM Motorized trunk/hatchback mt 109.99

MIRROR & LUGGAGE RACK MOUNTS & KITS

K-515S Lug rack SO-239 mt; new type SUV/SMA \$ 69.99
K-515SNMO Lug rack NMO mt; new type SUV/SMA 69.99
K-540 Mirror/luggage rack mt; under 45" ... 35.99
K-540KM Mirror/luggage rack mt w/coax 59.99
K-550* Lug rack mt; new mini vans (use GLP) 44.99
K-550KM* Luggage mt w/SO-239 base/coax 69.99

*K-550 series not recommended for Yae ATAS-100/120

MOUNTING GROUP HARDWARE

C-101 SO-239 mt, 6.5' RG-316 low-loss coax \$ 32.99
C-101NMO NMO mt, 6.5' RG-316 low-loss coax 32.99
C-104SMA 4' RG-58 ext cbl; SMA male & SO-239 16.99
C-105SMA 5' RG-58 ext cbl; C-101/SMA male 16.99
C-110 10' ext cable; C-101/K-601/K-400-3/8C 14.99
C-110BNC 10' extension cable to BNC male .. 22.99
C-110SMA 10' RG-58 ext cable; C-101/SMA male 22.99
C-211 SO-239 mt, 6.5' coax, 10' coax extend 44.99
C-213 SO-239 mt, 13.5' RG-316 low-loss coax 41.99

AES Price

Diamond - continued

AES Price

C-213NMO NMO mt, 13.5' RG-316 low-loss coax 41.99
GLP-5N UHF mtgr grp hrdrw; mini coax, Yae N D 1.99
NMO/UHF NMO to UHF adapter 12.99
NMO/UHF-B Black NMO to UHF adapter 13.99

MULTIBAND HF BASE VERTICAL ANTENNA

CP-6A 75/40/20/15/10/6m 200w PEP 16' vert \$299.99

MONO-BAND BASE STATION ANTENNAS

A-144SS 2m 5 el 37.5' boom 9db beam \$ 59.99
A-430S10 430 10 el 43" boom 13db beam 69.99
A-430S15 430 15 el 89" boom 14.8db beam .. 79.99
A-502HB 6m 2 el 2.6' boom 6.3db beam 99.99
A-504HB 6m 4 el 10.7' boom 10.8db beam ... 139.99
CP-22E 2m 6.5db 9' base antenna 54.99
DP-GH62 6m 6db 21' base antenna 139.99
F-22A 2m 6.7db 10.5' base antenna 99.99
F-23A 2m 7.8db 15' base antenna 119.99
F-23C1 148-154MHz 7.8db 15' comm base D 149.99
F-718A 440 11.5db 15' type N base antenna 209.99
F-718L 420-430 11.5db ATN N base ant ... D 159.99
G-200 2.4GHz 11db 6' N base antenna 199.99
D400-Y12 2.4GHz 12db 8el 15" bw 25m N beam 119.99

DUAL-BAND BASE STATION ANTENNAS

U-200 440/1.2GHz 8.3/11.7db 6' N base ant \$129.99
X-50A 2m/440 4.5/7.2db 5.6' base antenna .. 99.99
X-50NA 2m/440 4.5/7.2db 5.6' base N ant ... 99.99
X-200A 2m/440 6/8db 8.3' base antenna 139.99
X-500HNA Hvy duty 2m/440 8.3/11.7db 17.8" Nant 239.99
X-510MA 2m/440 8.3/11.7db 17.2" base ant 184.99
X-510NA 2m/440 8.3/11.7db 17.2" type N ant 184.99
X-700HA 2m/440 9.3/13db 24" type N base ant 399.99
X-700HNA 2m/440 9.3/13db 24" type N ant .. 399.99

TRI-BAND BASE STATION ANTENNAS

D-130J 25-1300 MHz 200w discone ant \$ 99.99
V-2000A 52-54MHz/2m/440 2.1/6.2/8.4db 8.3' 162.99
X-3200A 2m/220/440 6/7.8/8db 10' base 209.99
X-6000A 2m/440/1.2 6.5/9/10db 10.5" N ... 189.99

DUPLEXERS & TRIPLEXERS

MX-62M HF-6m & 2m/440, 12" cables dplxtr \$ 74.99
MX-72D HF-2m/440 400/150/100w duplexer 43.99
MX-72H HF-2m/440 duplexer w/12" cables .. 46.99
MX-72N HF-2m/440 dplxtr, 440 type N, 12" cables 49.99
MX-214D 2m/220 150/100w dplxtr, no cables 69.99
MX-324 2m/220/440 triplexer 99.99
MX-324D 2m/220/440 triplexer, no cables 99.99
MX-610 HF-6m duplexer; IC-706/FT-100 69.99
MX-2000 HF-6m/2m/440 400/400/250w triplexer 84.99
MX-3000 HF-2m/440/1.2 400/200/100w triplexer 79.99
MX-3000H HF-2m/440/1.2 400/200/100w triplexer 85.99

ACCESSORIES

CA-23RS DC-2500MHz 200w N lightning protect \$ 39.99
CA-23VR 2500MHz 200w N waterproof protect 44.99
CA-35R/RS DC-500MHz 400w lightning protect 29.99
CX-210A 1.5kw DC-1000MHz coax switch 44.99
CX-210N 1.5kw DC-1500MHz N coax switch .. 74.99
CX-310A HD 3-pos DC-800MHz coax switch .. 83.99
DL-30A 15/100w peak 0-500MHz dummy load 27.99
DL-30N 15/100w peak 0-500MHz N dummy load 39.99
GVZ-4000 Variable 40A switching ps/meter/spr 179.99

DRAKE (DRA)

R-8B Shortwave receiver 1499.99
MS-8 1592 Speaker 59.99
1590 35-55, 108-174 MHz VHF converter .. 269.99
7852 R-8B technical manual 39.99
1591 Interface computer soft; original R-8 ..D 99

DURACELL (DUR)

9V 9v alkaline battery \$ 3.49
AA-4 4-pack AA alkaline batteries 3.49

AES Price

DYNAMITE (DYN)

1000 Dyna-Sport 1500mah 6-cell flat nicad	\$ 16.99
1145 Dyna-Fun 2000mah 6-cell nicad	39.99
4010 Mega 1 AC/DC quick charger	29.99
4046 Vision Peak Plus AC/DC peak charger	69.99

ECG (ECG)

U-105 Light duty antenna rotor/3-wire	\$ 69.99
TB-105 Thrust bearing	18.99

EASY-UP (UPS OK) (EAS)

EZ 29-24S Stainless double strap chimney mt	\$ 17.99
EZ 48-3ABX 3' boxed tripod w/pitch pad kit	24.99
EZ 48-5ABX 5' boxed tripod w/pitch pad kit	34.99
EZ-516 5' 16 ga steel mast	7.99

EMERSON (EME)

EVO-6550 2nd 900MHz camera; EVO-6500 D	\$ 19.99
PDC-803/PMD-8030 Dig compass/LCD backlite	29.99
RP-005 6-func flashing safety strobe/reflector	6.99

EXCALIBUR (EXC)

908 Talking electronic chess computer	\$ 49.99
H-422 Large Forever Flashlight (clear case)	24.99
H-423 Small Forever Flashlight (clear case)	19.99

GE (GEX)

72887 Super Radio III AM/FM radio, AC/DC	\$ 49.99
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GAP VERTICALS (GAP)

DX-VIII Challenger 75°/40°/20°/15°/12°/10°/6°/2m 31.5'	\$299.99
*80m CW w/capacitor exchange from GAP	
Challenger Counterpoise	30.99
(SYN) 100' 3/4" black double braided rope	6.99
DX-VI Eagle 40°/20°/17°/15°/12°/10m 21.5' rigid	309.99
DX-IV Voyager 160°/80°/40°/20m 45'; use 350' guy	419.99
Voyager Counterpoise	55.99
(SYN) 350' 3/4" black double braided rope	39.99
Titan DX 75°/40°/20°/17°/15°/12°/10m, 25'	339.99
*80m CW w/capacitor exchange from GAP	
100' Guy Kit with clamp	14.99
200' Guy Kit with clamp	22.99
Ground Mount Quick tilt mt for vertical ant	79.99
Ladder Mount Quick tilt mt; campers/RVs	79.99
Hear It DSP noise eliminating speaker	159.99
In Line Module Hear It in line module noise elim	199.99

GARMIN (GAR)

Geko-101 Small GPS receiver	\$ 99.99
Geko-201 Small GPS receiver w/WAAS	139.99
GPS-12XL GPS receiver	219.99
GPS-72 Handheld track-plotted GPS	159.99
GPS-III Plus Handheld/dash mt mapping GPS D	299.99
GA-26C Low prof rem ant/cbl; GPSIII/III Plus	89.99
GA-27C Low prof rem ant/cbl; GPS-12CX/XL	89.99
010-10048-00 Mounting bracket; 12CX/XL	29.99
010-10082-00 Power/data cable	27.99
010-10085-00 Cig lighter adapter cable	23.99
010-10111-00 Mtg bkt; GPS-III Plus	31.99
010-10117-01 Caring case	6.99
010-10117-02 Caring case	12.99
010-10121-00 MCX-BNC adapt cbl; 12CX/XL	25.99
010-10141-00 PC interface cable	38.99
010-10165-00 PC cable w/cig adapter	45.99
010-10215-00 MapSource US CD; GPS-III Plus	99.99
010-10199-03 Carrying case; Street Pilot	4.99
010-10232-00 Carrying case; Street Pilot	6.99
StreetPilot III Deluxe GPS	699.99
GA-26C Low prof remote ant w/cable/BNC	89.99
010-10141-00 PC interface cable	38.99
010-10165-00 PC cable w/cig adapter	45.99
010-10227-00 Blank 8MB memory cartridge	58.99

Garmin - continued

StreetPilot 2610 Deluxe GPS	999.99
GA-27C Low profile remote ant/cable/MCX	89.99
eMAP Deluxe GPS/mapping/8MB card/PC cable D	199.99
GA-27C Low profile remote ant/cable/MCX	89.99
010-10121-00 MCX to BNC adapter cable	25.99
010-10203-00 Cig lighter cbl; eMAP & eTRES	39.99
010-10205-00 Data cable; eMAP & eTRES	22.99
010-10206-00 PC interface cbl; eMAP & eTRES	38.99
010-10215-00 MapSource US road&rec CD	99.99
010-10227-00 Blank 8MB mem cartridge	58.99
010-10468-00 MapSource MetroGuide CD	99.99
eTRES 12 ch mini GPS receiver	99.99
eTRES Summit 12ch mini GPS/compass/barometric	199.99
010-10203-00 Cig lighter cbl; eMAP & eTRES	39.99
010-10205-00 Data cable; eMAP & eTRES	22.99
010-10206-00 PC interface cbl; eMAP & eTRES	38.99
NavTalk Analog cellular phone/GPS combo	169.99
010-10215-00 MapSource US road&rec CD	99.99
GPS-V Deluxe Turn-by-turn navigation GPS/soft	399.99
GA-26C Low prof remote ant w/cable/BNC	89.99
010-10082-00 Power/data cable	27.99
010-10117-01 Caring case	6.99
010-10117-02 Caring case	12.99
010-10165-00 PC cable w/cig adapter	45.99
010-10468-00 MapSource MetroGuide CD	99.99
Forerunner 201 GPS/personal training device	149.99
iQue-3600 Handheld PDA w/integrated GPS	549.99
Rino-120 GPS/FRS/GMRS w/8mb mem/baseam	249.99
010-10117-02 Caring case; Rino-120	12.99

GEAR KEEPER (GEA)

RT2-4012 Hvy duty Mic Keeper w/snap clip	\$ 19.99
RT3-4653 Locking HT Gear Keeper/swivel belt clip	29.99

GEOCHRON (GEO)

World Watch Day/night Windows software	\$ 49.99
Std Blk/Gold* Std blk/gold trim world clock/map	999.99
Std Oak/Gold* Std oak/gold trim world clock/map	999.99

*These items are drop-shipped (shipped direct to you from the Geochron factory). On factory drop-shipsments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Redwood City, California via UPS. COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on this special order item. Other Geochron models available on special order.

GLEN MARTIN (GME)

TOWERS

M-1330A 30' alum tower package w/Hazer	T 1614.99
M-1340A 40' alum tower package w/Hazer	T 1831.99
M-1350A 50' alum tower package w/Hazer	T 2069.99
M-1840A 40' alum tower package w/Hazer	T 2149.99
M-1850A 50' alum tower package w/Hazer	T 2409.99
M-1860A 60' alum twr pack w/Voyager Hazer	T 3355.99
M-1870A 70' alum twr pack w/Voyager Hazer	T 3659.99
MB-1800 Messenger line kit for GME towers	72.99
KB-1000 57" side arm; M-13 series	81.99
KB-1300 57" side arm; M-18 series	84.99
M-22 10' galv steel M-22 tower section	431.99
CHB-22 Footing assembly for M-22	260.99
B-22 Leveling base for M-22	379.99

ROOF-TOP TOWERS

RT-424 4.5' roof-top tower, anodized aluminum	\$163.99
RT-832 8' roof-top tower, anodized aluminum	242.99
RT-936 9' roof-top tower, anodized aluminum	396.99
RT-1832 17.5' roof-top tower, anodized aluminum	531.99
RT-2632 26' roof-top tower, anodized aluminum	879.99
MC-10 Mast clamp; aluminum, 2 required	24.99
TB-25 Premium thrust bearing	89.99
LB-3755 Lag bolts, set of 8 3/4" x 5"	9.99

AES Price

Glen Martin - continued AES Price

EL-3744 Concrete L-bolts, set of 8	14.99
RA-6024 24" side arm for roof towers	41.99
RA-6048 48" side arm for roof towers	54.99

HAZERS FOR ROHN TOWERS

H-2 Heavy duty aluminum Hazer system	\$360.99
H-3 Standard duty aluminum Hazer system	273.99
H-4 Heavy duty galv steel Hazer system	348.99
BW-8001 Brake winch for H-2/3/4	80.99
HR-2040 Roller bearing set for Hazers	64.99
HR-6010 TIX plates for H-2/3/4/5	26.99
HS-1301 Side arm for Hazers	64.99
ML-2500 Messenger line kit for Rohn towers	76.99
VH8-60 Voyager Hazer for 60' Rohn 45G	1409.99
VH8-70 Voyager Hazer for 70' Rohn 45G	1544.99
VH9-50 Voyager Hazer for 50' Rohn 55G	1329.99
VH9-60 Voyager Hazer for 60' Rohn 55G	1449.99
VH9-70 Voyager Hazer for 70' Rohn 55G	1564.99

LIGHTNING PROTECTION

LR-8400 Premium lightning rod kit	\$ 99.99
GR-4400 Ground rod wire clamp	6.99
GR-5080 8' x 3/4" ground rod	20.99
TL-0470 Terminal lug	2.99
LR-8418 Lightning rod point, 18" long	38.99
LR-8452 Clamp for holding rod to 2" mast	25.99
LR-8451 Clamp for holding rod to 1 1/2" mast	24.99
CW-2540 25' #4 bare copper ground wire	20.99
CW-5040 50' #4 bare copper ground wire	41.99
CW-7540 75' #4 bare copper ground wire	59.99
CW-1040 100' #4 bare copper ground wire	66.99
CW-1240 125' #4 bare copper ground wire	98.99
CW-1540 150' #4 bare copper ground wire	118.99

GUYING

HP-3000 Kevlar guy cable, 3000# break strength	per ft \$.99
HP-4500 Kevlar guy cable, 4500# break strength	per ft 1.49
HP-7500 Kevlar guy cable, 7500# break strength	per ft 1.99
WR-125 3/4" galv 7 x 7 guy cable	per ft .69
WR-380 3/4" galv 7 x 7 guy cable	per ft .49
WRS-156 1/2" stainless 7 x 19 guy cable per ft	.79
WRS-187 3/4" stainless 7 x 19 guy cable per ft	.89
WRS-250 1" stainless 7 x 19 guy cable per ft	.99
WR-1862 3/4" U-bolt clip (also for Kevlar 3000/4500)	1.69
WR-2565 3/4" U-bolt clip (also for Kevlar 7500)	1.69
WR-3164 3/4" U-bolt clip	1.99
PT-2500 3/4" heavy duty thimble (for all Kevlar)	2.69
PT-3100 3/4" heavy duty thimble	2.99
PT-3700 3/4" heavy duty thimble	3.39
H-165 3/4" end cap (for Kevlar 3000/4500)	.79
H-164 3/4" end cap (for Kevlar 7500)	.89
H-142 3/4" end cap	.99
RG-4010 3/4" link connecting earthscrew to turnbuckle	8.99
ES-40 4" dia x 30" earth screw	22.99
EG-40 4" dia x 30" galvanized earth screw	33.99
ES-60 6" dia x 48" earth screw	39.99
EG-60 6" dia x 48" galvanized earth screw	55.99
ES-80 8" dia x 66" earth screw	68.99
TB-3806 3/4" x 2.375" OD heavy duty turnbuckle	18.99
TB-5009 3/4" x 9" galvanized turnbuckle	24.99
TB-6212 3/4" x 12" galvanized turnbuckle	41.99

MASTS

M-1049 9' x 2" OD heavy duty galv steel mast	\$ 79.99
M-1040 10' x 2" OD heavy duty galv steel mast	84.99
MA-1040 10' x 1.92" OD medium duty alum mast	94.99
MA-1049 9' x 1.92" OD medium duty alum mast	89.99
MA-2069 9' x 2.375" OD heavy duty alum mast	99.99
MA-1050 5' x 1.92" OD medium duty alum mast	61.99
MA-5050 5' x 1.31" OD light duty alum mast	41.99
MP-1409 9' x 2" OD .250 wall xtra HD fg mast	129.99
MP-1809 9' x 2" OD .125 wall med duty fg mast	76.99

SIDE ARMS

HS-2500 36" universal side arm mount	\$ 65.99
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Glen Martin - continued AES Price

HS-6000 52" universal side arm mount	78.99
WINCHES	
B-800 800 lb capacity w/4.5:1 gear ratio	\$ 72.99
W-1100 1100 lb capacity w/3.9:1 gear ratio	42.99
B-2000 2000 lb capacity w/17:1 gear ratio	126.99
WA-1200 4000 lb electric winch, 115 vac	489.99
WD-1200 4000 lb electric winch, 12 vdc	448.99
W-6371 Pendant for 12 vdc	178.99
W-6372 Pendant for 115 vac	102.99

TOWER CLIMBING EQUIPMENT

FP-5600 2 d-ring full body climbing harness (S-M)	\$ 89.99
FP-5601 2 d-ring full body climbing harness (L-XL)	89.99
FP-5602 4 d-ring full body climbing harness (S-M)	106.99
FP-5603 4 d-ring full body climbing harness (L-XL)	106.99
FP-6600 6 d-ring full body climbing harness (XS)	260.99
FP-6601 6 d-ring full body climbing harness (S)	236.99
FP-6602 6 d-ring full body climbing harness (M)	236.99
FP-6603 6 d-ring full body climbing harness (L)	236.99
FP-6604 6 d-ring full body climbing harness (XL)	236.99
FP-7600 AeroClimber 6 d-ring saddle harness (XS)	231.99
FP-7601 AeroClimber 6 d-ring saddle harness (S)	209.99
FP-7602 AeroClimber 6 d-ring saddle harness (M)	209.99
FP-7603 AeroClimber 6 d-ring saddle harness (L)	209.99
FP-7604 AeroClimber 6 d-ring saddle harness (XL)	209.99
FP-2606 1"x6" web lanyard/dbl locking snaphooks	32.99
FP-2903 1"x3" web lanyard, 3" throat, snaphooks	38.99
FP-2904 1"x4" web lanyard, 3" throat, snaphooks	39.99
FP-2905 1"x5" web lanyard, 3" throat, snaphooks	39.99
FP-2906 1"x6" web lanyard, 3" throat, snaphooks	40.99
FP-2913 1"x3" web lanyard, 3/8" & 1 1/2" throat openings	63.99
FP-2914 1"x4" web lanyard, 3/8" & 1 1/2" throat openings	64.99
FP-2915 1"x5" web lanyard, 3/8" & 1 1/2" throat openings	64.99
FP-2916 1"x6" web lanyard, 3/8" & 1 1/2" throat openings	65.99
FP-2923 1"x3" web lanyard, 3/8" & 2 1/2" throat openings	69.99
FP-2924 1"x4" web lanyard, 3/8" & 2 1/2" throat openings	70.99
FP-2925 1"x5" web lanyard, 3/8" & 2 1/2" throat openings	70.99
FP-2926 1"x6" web lanyard, 3/8" & 2 1/2" throat openings	71.99

All GLEN MARTIN orders are plus freight at Glen Martin's rates direct to you from the factory. There is also a \$75 residential address delivery charge on M-13 & M-18 series towers. We prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your order. Please allow sufficient delivery time. Most truck lines will not unload towers, so please be sure to have enough manpower and/or equipment on hand.

GROTHE (GRO)

VS-2 Emergency vehicle siren	\$ 89.99
VS-2LS/A Window mt siren/amber halogen	299.99
VS-2LS/B Window mt siren/blue halogen	299.99
VS-2LS/R Window mt siren/red halogen	299.99
VS-3 Volunteer vehicle PA/horn w/spkr	129.99
VS-4 P/A emergency vehicle siren w/spkr	139.99

GRUNDIG (GRU)

e-Traveller VII Mini AM/FM/SW Rcvr	\$ 79.99
e-Zone FM receiver	14.99
Classic 960 AM/FM/SW table radio	149.99
FR-200 AM/FM/SW/flashlight/crank	39.99
G-2000A Porsche design AM/FM/SW receiver	79.99
MiniWorld 100PE Mini AM/FM/SW receiver	29.99
S-350 AM/FM/SW receiver	99.99
Satellit 800 AM/FM/SW/aircraft receiver	499.99
Yacht Boy 300PE Port AM/FM/SW/LW Rcvr	79.99
Yacht Boy 400PE Port AM/FM/SW/LW Rcvr/ps	149.99
Yacht Boy 550 AM/FM/SW receiver	99.99

HAL (HAL)

DSP-4100/2K HF DSP modem	special order 1495.99
RTTY-1 RTTY tuning indicator	99.99

HARGER (HRG)

GBIS18114AE 3/8" copper entrance ground bar kit	\$ 27.99
GBIS18148AE 3/8" copper station ground bar kit	64.99
GEL3AE Package of 5 HD grounding lugs	15.99
GP1868.78AE 3/8" copper single pt gnd panel kit	54.99
GBX976AE NEMA-4x weatherproof enclosure	89.99

HEIL (HEI)

BM-5-4 Boom mic/single headset (HC-4)	\$ 69.99
BM-5-5 Boom mic/single headset (HC-5)	69.99
BM-5-1C Boom mic/single headset/adaptor; lcom	86.99
BM-10-4 Boom mic/headset (HC-4)	89.99
BM-10-5 Boom mic/headset (HC-5)	89.99
BM-10-1C Boom mic/headset/adaptor; lcom	106.99
PRO-SET-4 Deluxe boom mic/headset (HC-4)	130.99
PRO-SET-5 Deluxe boom mic/headset (HC-5)	130.99
PRO-SET-1C Dlx boom mic/headset/adaptor; lcom	147.99
PRO-SET-PLUS Dlx boom mic/headset (HC4&5)	189.99
PRO-SET-PLUS-1C Dlx bn mic/headset (HC4&5); lco	206.99
PSQP-4 Pro-Set Quiet Phone 4 boom mic/headph	199.99
PSQP-5 Pro-Set Quiet Phone 5 boom mic/headph	199.99
PSQP-1C Pro-Set Quiet Phone; lcom bn mic/headph	216.99
AD-1-I Pro-Set 8-pin adaptor cord for lcom	17.99
AD-1-K Pro-Set 8-pin adaptor cord; Kenwood	17.99
AD-1-T Pro-Set 4-pin adaptor cord; Ten-Tec	17.99
AD-1-Y Pro-Set 8-pin adaptor cord; Yaesu	17.99
AD-1-I-M Pro-Set modular adaptor cord; lco	17.99
AD-1-K-M Pro-Set modular adaptor cord; Ken	17.99
AD-1-Y-M Pro-Set modular adaptor cord; Yae	17.99
Traveler-8PIC Bm mic/single headset; 8-pin lcom	89.99
Traveler-706 Boom mic/single headset; IC-706	89.99
Traveler-K Boom mic/single headset; Ken 8-pin	89.99
Traveler-KM Bm mic/sgl headset; Ken modular	89.99
Traveler-YM Bm mic/sgl headset; Yae modular	89.99
FS-2 Dual switch foot switch	38.99
HS-1 Hand switch	25.99
AD-100 Mic/boomset adapt; FT-100/AD-1Y/CC-1Y	25.99
ADM-Y817 Mic/boomset adapt; FT817/AD1Y/CC1Y	25.99
GM-4 Goldline dual element studio mic w/HC-4	140.99
GM-5 Goldline dual element studio mic w/HC-5	140.99
GM-V Goldline vintage studio mic/matching xfmr	155.99
HCL-4 Classic 1930's desk mic/studio el & HC-4	229.99
HCL-5 Classic 1930's desk mic/studio el & HC-5	229.99
HM-10-4 Microphone with HC-4 element	65.99
HM-10-5 Microphone with HC-5 element	65.99
HM-10-Dual Mic w/HC-4 & HC-5 elements	115.99
ICM Pre-Pro lcom electret mic w/cable	89.99
CC-1-C 3/8" plug cable for Collins/Drake	33.99
CC-1-D 4-pin cable for Drake	30.99
CC-1-I 8-pin cable for lcom	30.99
CC-1-I-M Modular cable for lcom	30.99
CC-1-K 8-pin cable for Kenwood	30.99
CC-1-K-M Modular cable for Kenwood	30.99
CC-1-T Cable for Ten-Tec	30.99
CC-1-Y 8-pin cable for Yaesu	30.99
CC-1-Y-M Modular cable for Yaesu	30.99
HSTA-706 Adapt; HM-I lcom 706/modular plug	20.99
PL-2 Proline boom	59.99
PL-2T Topless proline boom	75.99
FM-1 Flange mount for PL-2T	15.99
RS-1 Riser 12" flange mount for PL-2T	25.99
SB-1 Small adjustable mic boom w/c clamp	33.99
TB-1 Table base microphone stand	25.99
HMM-1C Condensor hand mic/8-pin plug; lcom	58.99
HMM-K Dual el hand mic/HC-4/8-pin plug; Ken	78.99
HMM-Y Dual el hand mic/HC-4/8-pin plug; Yae	78.99
HQP Quiet Phone Noise cancelling headphones	99.99
Boom Clip for BM-series	5.99
Ear Pads for BM-series	pair 5.99
Ear Pads for PRO-series	pair 6.99

AES Price

Heil - continued

Ham Radio Handbook	12.95
CB-1 Classic base	65.99
HD-AT 6db headph attenuator, 3/8" m-3/4" adapt	5.99
SM-1 Shock mount for any microphone boom	50.99
TM-1 Tri-mount microphone adapter	14.99
XT-1 Audio matching xfmr; lo-Z mic/tube Xcvr	15.99

HIGH SIERRA (HIS)

Platinum Pack Black HS-1800/Pro w/instant kit	\$495.00
HS-120 Capacity hat	50.00
HS-202CL 2" rcvr lay back adapter; univ mtk bgt	100.00
HS-214CL 1 1/4" rcvr lay back adapt; univ mtk bgt	100.00

HobbyZone (HBZ)

1500 Firebird II RTF electric airplane	D \$ 79.99
1011 6v 600mah NiMH battery for 1500	17.99
1026 DC peak charger	19.99
5500 Firebird II RTF electric airplane	84.99
2500 Firebird Commander RTF electric airplane	109.99
3305 Zig Zag Racer RTR electric boat	79.99
3500 Aerobird Challenger RTF electric airplane	149.99
4000 Firebird RTF electric airplane	119.99
1012 7.2v 900mah NiMH; 2500/3305/3500/4000	24.99
1013 8.4v 900mah NiMH; 2500/3500/4000	29.99
1026 DC peak charger	19.99
2015 3-hr wall charger for 3305/4000	8.99
4020 Sonic combat module; 2500	23.99
4025F Stealth target/combat module; *2500/4000	19.99
*Requires 4020 w/model 2500	
6023 Aerial drop module; 2500/4000	19.99
7800 Sky Surfer RTF electric airplane	249.99
1026 DC peak charger	19.99
7809 7.2v 1100mah battery for 7800	29.99

House of Deals (HOU)

CPM-310 6" adjustable pedestal mount	\$ 14.99
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HUSTLER (HUS)

RM-80 80m CW 400w PEP resonator	\$ 26.99
RM-75 75m phone 400w PEP resonator	26.99
RM-60 60m phone 400w PEP resonator	26.99
RM-40 40m 400w PEP resonator	24.99
RM-30 30m 400w PEP resonator	24.99
RM-20 20m 400w PEP resonator	21.99
RM-17 17m 400w PEP resonator	21.99
RM-15 15m 400w PEP resonator	15.99
RM-12 12m 400w PEP resonator	15.99
RM-11 CB 400w PEP resonator	15.99
RM-10 10m 400w PEP resonator	15.99
RM-6 6m 400w PEP resonator	15.99
RM-80S 80m CW 2kw PEP resonator	49.99
RM-75S 75m phone 2kw PEP resonator	49.99
RM-40S 40m 2kw PEP resonator	35.99
RM-20S 20m 2kw PEP resonator	28.99
RM-15S 15m 2kw PEP resonator	24.99
RM-11S CB 2kw PEP resonator	23.99
RM-10S 10m 2kw PEP resonator	23.99
RM-6S 6m 2kw PEP resonator	23.99
MO-1 54" mast for fender or deck mount	31.99
MO-2 54" mast for bumper mount	31.99
MO-3 54" no break-over mast	23.99
MO-4 22" mast for special applications	19.99
VP-1 Tri-band adapter	5.99
RSS-2 Resonator spring	9.99
QD-2 Stainless quick disconnect	19.99
L-14-144 12' RG-58, PL-259 to lugs	9.99
L-14-240 20' RG-58, PL-259 to lugs	12.99

STAINLESS 2" MOBILE BALL MOUNTS

SSM-1 Ball & spring, cadmium hardware	\$ 46.99
SSM-2 Ball, cadmium hardware	26.99
SSM-3 Stainless steel spring	24.99

Hustler - continued**AES Price****1-1/2" MOBILE BLAD MOUNTS**

C-32 Chrome plated ball	\$ 11.99
C-30 Chrome plated spring	11.99
C-29 Stainless steel spring	17.99
BM-1 Single strap bumper mt w/C-32	21.99

3/8-24 THREAD MOBILE MOUNTS

HLM Trunk lip mount w/swivel	\$ 22.99
HOT Hustloff trunk lip mt w/swivel	23.99
MBM Super magnet mount w/16" coax	19.99
RVM Recreational vehicle mount	20.99
TLM Trunk lip mount	21.99

HF ANTENNAS

4-BTV 40/20/15/10m 21' trap vertical	\$119.99
5-BTV 80/40/20/15/10m 25' trap vertical	149.99
30-MTK 30m trap kit for 4-BTV/5-BTV	41.99
6-BTV 80/40/30/20/15/10m 24' trap vert	179.99

VHF/UHF BASE STATION ANTENNAS

G3-144 2m 3db 7.5' vertical antenna	\$ 63.99
G6-270R 2m/440 6db 7.6' base station ant ..	159.99
G7-144 2m 7db 15' vertical antenna	159.99
G7-220 220 MHz 7db 10' vertical antenna	149.99
G6-440 440 MHz 6db 7' vertical antenna	139.99

VHF/UHF MOBILE ANTENNAS

BBG-144 2m 3.4db NMO coil/whip only	\$ 39.99
BBGT-144 2m 3.4db NMO trunk lip mt ant	49.99
BBG-440-5 440 5db NMO coil/whip only	39.99
BBGT-440-5 440 5db NMO trunk lip mt ant ..	49.99
BBL-144A 2m 3/4" hole mt antenna, 3.4db	39.99
BBLT-144A 2m trunk lip mt ant, 3.4db	47.99
CG-144 2m 3/4" ant, 7' high, 5.2db	31.99
CGT-144 2m trunk mt ant, 7' high, 5.2db	51.99
CG-220 220 MHz 3/4" ant, 5.2db	29.99
CGT-220 220 MHz 5.2db trk mt ant	29.99
LMB-144 2m 3.4db black NMO coil/whip only ..	22.99
LMB-440-5 440 5db black NMO coil/whip only ..	19.99
LMC-144 2m 3.4db NMO coil/whip only	19.99
LMT-270 2m/440 2.4/4db NMO coil/whip only ..	31.99
LMC-440-5 440 5db NMO coil/whip only	19.99
LMG-144 2m 3.4db NMO pushpin coil/whip only ..	25.99
LMG-440-5 440 5db NMO pushpin coil/whip only ..	19.99
MKR-2 Radial kit for CG/RX/SF-antennas	20.99
MX-2 2m 3db black & chrome NMO mag mt ant ..	34.99
MX-2B 2m 3db all black NMO mag mt ant	39.99
MX-220 220 3db blk & chrome NMO mag mt ant ..	34.99
MX-270 2m/440 2.4/4db chrome NMO mag mt ant ..	59.99
MX-440 440 5db blk & chrome NMO mag mt ant ..	36.99
MX-440B 440 5db all black NMO mag mt ant ..	36.99
RX-2 2m 3.4db magnetic mount ant	24.99
RX-220 220 3.4db magnetic mt antenna	24.99
RX-440 440 5db magnetic mt antenna	24.99
SF-2 2m 3/4" ant, 4' high, 3.4 db	14.99
SF-220 220 MHz 3/4" ant, 3 db	14.99
THF 140-500 MHz 1/2 wave trunk mount ant ..	23.99
UGM 140-500 MHz 1/2 wave BNC mag mt ant ..	21.99
UHT-1 140-500 MHz 1/2 wave roof mt ant	14.99

CB & MONITOR ANTENNAS

1C-11 White trunk mount CB antenna	\$ 13.99
1C-11B Black trunk mt CB antenna	13.99
1C-100 White magnetic mount CB antenna	19.99
1C-100B Black magnetic mt CB antenna	19.99
DTG 25' gr double-talk gutter mt CB ant	39.99
F6-27S 48" CB whip	11.99
HQ-27 Power Packer 3/4-24 CB whip	17.99
HQ-27M Power Packer trunk mt CB antenna	36.99
HQD Dual flg mirror mount CB antenna	49.99
HQT Single flg mirror mount CB antenna	27.99
RQM Magnetic mount CB antenna	19.99
RTG-27L 25" CB antenna w/rain gutter mt	26.99
RTM 25" magnetic mount CB antenna	16.99

Hustler - continued**AES Price**

RTS-27L 25" CB antenna w/roof mount	26.99
SCB/BLK 46" black CB whip	29.99
SCB/BLU 46" blue CB whip	29.99
SCB/RED 46" red CB whip	29.99
SCB/WHY 46" white CB whip	29.99
SCB-S/BLK 35" black CB whip	29.99
SCB-S/BLU 35" blue CB whip	29.99
SCB-S/RED 35" red CB whip	29.99
SCB-S/WHY 35" white CB whip	29.99
DCL-B Discone monitor ant/50' coax/BNC plug ..	34.99
DCX Discone monitor ant; 40-700 MHz	23.99
MOR-B Roof/deck mt tri-band BNC monitor ant ..	18.99
MT-B Trunk lip mt tri-band BNC monitor ant ..	19.99
MRM-B Magnet mt tri-band BNC monitor ant ..	19.99

HY-GAIN (HYG)**HF BEAM ANTENNAS**

LJ-103BA 3el 7.9db 8' boom 10m beam	\$159.99
LJ-105CA 5el 10.8db 24' boom 10m beam	289.99
LJ-153BA 3el 7.9db 12' boom 15m beam	209.99
LJ-204BA 4el 8.2db 26' boom 20 or 17m beam	539.99
TH-3JRS 3el 600w PEP 20/15/10m beam	359.99
TH-3MK 3el 8db 14' boom 20/15/10m beam	469.99
TH-5MK2 5el 8.3db 19' boom 20/15/10m beam ..	699.99
TH-7DX 7el 8.77db 24' boom 20/15/10m beam ..	799.99
BN-86 3-30MHz balun for HF beam	79.99

MULTI-BAND HF VERTICAL ANTENNAS

AV-14AVQ 40/20/15/10m 18' vertical ant	\$169.99
AV-18AVQ II 80/40/20/15/10m vertical ant	229.99
AV-18HT HyTower 80/40/20/15/10m 53' vert T* ..	799.99
AV-620 20/17/15/12/10/6m 22.5' vertical	269.99
AV-640 40/30/20/17/15/12/10/6m 25.5' vert ..	359.99
DX-88 160/40/30/20/17/15/12/10m 25' vert ..	369.99

*AV-18HT is drop-shipped (shipped direct to you from the Hy-Gain factory). On these factory drop-shippings we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Starkville, Mississippi via truck. COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order items.

VHF/UHF ANTENNAS

DB-218SAT VHF/UHF Oscar Link system	\$529.99
VB-25FM 5el 11.2db 75" boom 2m beam	59.99
VB-64DX 4el 10.4db 12" boom 6m beam	144.99

ANTENNA ROTORS

AR-40 3 sq ft antenna rotor/5-wire	\$269.99
CD-45 II 8.5 sq ft antenna rotor/8-wire	369.99
HAM-IV 15 sq ft antenna rotor/8-wire	529.99
HAM-V Digital 15 sq ft antenna rotor/8-wire	899.99
ROT-300A Hvy duty dig 25 sq ft rotor/8-wire ..	1229.99
T-2X Tailtwister 20 sq ft antenna rotor/8-wire ..	619.99
T-2XD Tailtwister dig 20 sq ft ant rotor/8-wire ..	979.99

OPTIONAL ACCESSORIES FOR ROTORS

DCU-1 Dig rotor control; CD-45/HAM-IV/T-2X ..	\$569.99
MSHD Lwr mast support; HAM-IV/V/T-2X/DX ..	99.99
MSLD Lower mast support; CD-45-II/AR-40	39.99
TSP-1 Tower spacer plate	34.99

See BELDEN for rotor cable**iBOTZ (IBO)**

MR-1001 Soundtracker robot kit	\$ 29.99
MR-1002 Antoid robot kit	49.99

ICC (ICC)

Nitelogger II Automatic tape recorder activator ..	\$ 69.99
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ICOM (ICO)

UT-66 Voice synthesizer; IC-775DSP	\$ 69.99
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Icom - continued**AES Price**

IC-756PRO II Xcvr/Rcvr/6m/IF-DSP/tuner/keyer *\$2299.99

*Price w/instant coupon; coupon expires 6/30/04

PS-125 ps FREE with IC-756PRO II! thru 6/30/04

(BET) I-Mate Msg acc; 746PRO/756PRO II	74.99
PS-125 25A switching power supply	299.99
AH-4 80-6m 120w auto wire ant tuner	259.99
AH-2B Whip w/mt; 40-6m use tuner	299.99
AH-2B extra whip only	119.99

CT-17 CI-V level converter 129.99 |

HM-36 Scanning hand mic 74.99 |

OPC-025D Extra DC cable 29.99 |

SM-6 Desk microphone 99.99 |

SM-20 Deluxe desk microphone 199.99 |

SP-20 Speaker w/audio filter 239.99 |

SP-21 External speaker 119.99 |

UT-102 Voice synthesizer 74.99 |

RS-746 Win remote control software; IC-746 D 69.99 |

IC-746PRO Xcvr/Rcvr/6m/2m/IF-DSP/tuner/mic *\$1379.99

*Price w/instant coupon; coupon expires 6/30/04

PS-125 ps FREE with IC-746PRO! thru 6/30/04

(BET) I-Mate Msg acc; 746PRO/756PRO II 74.99 |

PS-125 25A switching power supply 299.99 |

AH-4 80-6m 120w auto wire ant tuner 259.99 |

AH-2B Whip w/mt; 40-6m use tuner 299.99 |

AH-2B extra whip only 119.99 |

CR-338 High stability crystal unit 81.99 |

CT-17 CI-V level converter 129.99 |

HM-36 Scanning hand mic 74.99 |

OPC-025D Extra DC cable 29.99 |

SM-6 Desk microphone 99.99 |

SM-20 Deluxe desk microphone 199.99 |

SP-20 Speaker w/audio filter 239.99 |

SP-21 External speaker 119.99 |

UT-102 Voice synthesizer 74.99 |

IC-730 Tone encoder; IC-707 49.99 |

IC-718 HF Xcvr/SV/Rcvr/mic 569.99 |

UT-106 DSP FREE with IC-718! thru 6/30/04

(BET) 706 Tune Control for IC-718 32.99 |

PS-125 25A switching power supply 299.99 |

AH-4 80-6m 120w auto wire ant tuner 259.99 |

AH-2B Whip w/mt; 40-6m use tuner 299.99 |

AH-2B extra whip only 119.99 |

AT-180 Auto coax antenna tuner; HF-6m 369.99 |

OPC-598 23' extension cable for AT-180 69.99 |

CR-338 High stability crystal unit 81.99 |

CT-17 CI-V level converter 129.99 |

FL-52A 500 Hz 455 KHz IF CW filter 179.99 |

FL-53A 250 Hz 455 KHz IF CW filter 179.99 |

FL-96 2.8 KHz 455 KHz IF SSB filter 139.99 |

FL-222 1.9 KHz 455 KHz IF SSB filter 199.99 |

FL-257 3.3 KHz 455 KHz IF SSB filter 189.99 |

Suggest dealer installation of filters in IC-718

MB-5 Mobile mount 59.99 |

MB-23 Side mount carrying handle 15.99 |

OPC-025D Extra DC cable 29.99 |

SM-6 Desk microphone 99.99 |

SM-20 Deluxe desk microphone 199.99 |

SP-7 Small external speaker 94.99 |

SP-20 Speaker w/audio filter 239.99 |

SP-21 External speaker 119.99 |

UT-102 Voice synthesizer 74.99 |

UT-106 Plug-in DSP 139.99 |

IC-703 10w mini HF Xcvr/50 ohm tuner/DSP *\$619.99

*Price w/instant coupon; coupon expires 6/30/04

IC-703 Plus 10w mini HF+6m Xcvr/tuner/DSP *\$649.99

*Price w/instant coupon; coupon expires 6/30/04

AH-4 80-6m 120w auto wire ant tuner 259.99 |

AH-2B Whip w/mt; 40-6m use tuner 299.99 |

AH-2B extra whip only 119.99 |

AH-703 40/20/15/10/6m 20w 4.6' antenna 199.99 |

BC-155A Battery charger for BP-228 29.99 |

Icom - continued

AES Price

BP-228	9.6v 2800mah external nicad pack	89.99
CT-17	CI-V level converter	129.99
FL-52A	500 Hz 455 KHz IF CW filter	179.99
FL-52A	250 Hz 455 KHz IF CW filter	179.99
FL-232	1.9 KHz 455 KHz IF SSB filter	199.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
HM-118TN	TTP microphone	59.99
LC-156	Back pack carrying case	89.99
MB-62	Mounting bracket for main unit	25.99
MB-63	Mounting bracket for control panel	18.99
MB-65	Mounting base platform	35.99
MB-72	Carrying handle	14.99
OPC-581	11.5' separation cable	60.99
OPC-587	16' separation cable	79.99
OPC-599	7+8-pin to 13-pin adapter	60.99
OPC-742	13-pin cable	59.99
OPC-1229	Extra DC cable	28.99
RMK-706	Package; MB-62/MB-63/OPC-581	70.99
SM-6	Desk microphone	99.99
SM-20	Deluxe desk microphone	199.99
OPC-589	8-pin to jack adapt; SM-6/8/20	35.99
SP-7	Small external speaker	94.99
SP-10	Slim-line external speaker	69.99
UT-102	Voice synthesizer	74.99
IC-706 Mk II-G	Mini Xcvr/Rcvr/6m/2m/440/DSP	769.99
RMK-706 FREE with IC-706 Mk II-G!	thru 6/30/04	
(BET)	706 Tune Control for IC-706-series	32.99
PS-125	25A switching power supply	299.99
AH-4	80-6m 120w auto wire ant tuner	259.99
AH-28	Whip w/mnt; 40-6m use tuner	299.99
AH-28	extra whip only	119.99
AT-180	Auto coax antenna tuner; HF+6m	369.99
OPC-598	23' extension cable for AT-180	69.99
CR-282	High stability crystal unit; Mk II G	149.99
Suggest dealer install; CR-282, IC-706 Mk II-G		
CT-17	CI-V level converter	129.99
FL-100	500 Hz 9 MHz IF CW filter	119.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
FL-223	1.9 KHz 9 MHz IF SSB filter	89.99
FL-232	350 Hz 9 MHz IF CW/RTTY filter	89.99
HM-118TN	TTP microphone	59.99
LC-156	Back pack carrying case	89.99
MB-62	Mounting bracket for main unit	25.99
MB-63	Mounting bracket for control panel	18.99
MB-65	Mounting base platform	35.99
MB-72	Carrying handle; Mk II-G only	14.99
OPC-025D	Extra DC cable	29.99
OPC-581	11.5' separation cable	60.99
OPC-587	16' separation cable	79.99
OPC-599	7+8-pin to 13-pin adapter	60.99
OPC-742	13-pin cable	59.99
RMK-706	Package; MB-62/MB-63/OPC-581	70.99
SM-6	Desk microphone	99.99
SM-20	Deluxe desk microphone	199.99
OPC-589	8-pin to jack adapt; SM-6/8/20	35.99
SP-7	Small external speaker	94.99
SP-10	Slim-line external speaker	69.99
UT-102	Voice synthesizer	74.99
AH-710	1.9-30 MHz 80' folded dipole/98' coax	269.99
PW-1	160-15+6m linear amplifier/ps/tuner	4549.99
OPC-137	Adapter cable; older Icom Xcvr.D	19.99
UT-86	Tone squelch; plain IC-706 Mk II	69.99

RECEIVERS

R-2-07*	.5MHz-1.3GHz AM/FM hand Rcvr	..D \$149.99
AD-92SMA	SMA- BNC adapter	16.99
BC-127A	Extra nicad charger	20.99
CS-R2	DOS programming software	2.99
OPC-474	Cloning cable (R-2 to R-2)	18.99
OPC-478	PC RS-232C cable	45.99
CSW-HHRX	Win prog soft/cable; R-2/R-10	50.99

Icom - continued

AES Price

HP-4	Lightweight headphones	29.99
SP-13	Earphone	4.99
R-5-06	15M-1.3G AM/FM hand/batts/cgr/cell bldk	199.99
R-5-11*	.5MHz-1.3GHz AM/FM hand Rcvr	199.99
AD-92SMA	SMA- BNC adapter	16.99
CP-18A	Cig lighter cable	30.99
CS-R5	Win programming software	40.99
OPC-474	Cloning cable (R-5 to R-5)	18.99
OPC-478	PC RS-232C cable	45.99
OPC-478U	PC USB cable	60.99
HP-4	Lightweight headphones	29.99
LC-146A	Carrying case	24.99
R-3-26	.5M-2.45G AM/FM/TV hand Rcvr/cell bldk	349.99
R-3-27*	.5MHz-2.45GHz AM/FM/TV hand Rcvr	489.99
BC-135	Desktop charger w/adaptor cup	80.99
BP-206	Extra 3.7v 1650mah lith ion batt	63.99
CP-18A	Cig lighter cable	30.99
CS-R9	Win programming software	24.99
OPC-474	Cloning cable (R-3 to R-3)	18.99
OPC-478	PC RS-232C cable	45.99
OPC-478U	PC USB cable	60.99
HP-4	Lightweight headphones	29.99
LC-151	Carrying case	24.99
SP-13	Earphone	4.99
R-10-05	.5M-1.3G AM/FM/SSB hand/cell bldk	299.99
R-10-15*	.5MHz-1.3GHz AM/FM/SSB HH Rcvr	299.99
CP-12L	Right angle cig cable w/filter	36.99
CS-R10	DOS programming software; R-10	13.99
OPC-474	Cloning cable (R-10 to R-10)	18.99
OPC-478	PC RS-232C cable	45.99
CSW-HHRX	Win prog soft/cable; R-10/R-2	50.99
CT-17	CI-V level converter	149.99
HP-4	Lightweight headphones	29.99
LC-140	Carrying case for R-10	38.99
OPC-254L	Right angle mini DC pw cable	14.99
SP-13	Earphone	4.99
BON CS-40	Bonito soft; PCR-1000-02/07	..Δ 68.99
PCR-1000-02 BON	PC Rcvr/software/cell bldk	374.99
PCR-1000-07 BON*	PC Rcvr/software	374.99
AH-7000	25-1000 MHz discone ant w/coax	169.99
OPC-131	DC power cord	13.99
SP-7	Small external speaker	94.99
SP-10	Slim-line external speaker	69.99
UT-106	Plug-in DSP unit	139.99
R-75	.03-60 MHz shortwave receiver	529.99
UT-106 DSP FREE with R-75!	thru 6/30/04	
CR-282	High stability crystal unit	149.99
CT-17	CI-V level converter	129.99
FL-52A	500 Hz 455 KHz IF CW filter	179.99
FL-53A	250 Hz 455 KHz IF CW filter	179.99
FL-96	2.8 KHz 455 KHz IF SSB filter	139.99
FL-100	500 Hz 9 MHz IF CW filter	119.99
FL-101	250 Hz 9 MHz IF CW filter	119.99
FL-103	2.8 KHz 9 MHz IF SSB filter	109.99
FL-222	1.9 KHz 455 KHz IF SSB filter	199.99
FL-223	1.9 KHz 9 MHz IF SSB filter	89.99
FL-232	350 Hz 9 MHz IF CW/RTTY filter	89.99
FL-257	3.3 KHz 455 KHz IF SSB filter	189.99
MB-5	Mobile mount	59.99
MB-23	Side mount carrying handle	15.99
OPC-869	DC cable	13.99
RS-R75	PC control software w/RS-232 cable	80.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
UT-106	Plug-in DSP unit	139.99
R-8500-02	1M - 2G receiver/cell blocked	1499.99
R-8500-04*	1MHz - 2GHz receiver	1499.99
AH-7000	25-1000 MHz discone ant w/coax	169.99
CR-293	High stability xtal unit	279.99
FL-52A	500 Hz CW filter	179.99
MB-12	Mobile mount	49.99

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AES Price

MB-23	Side mount carrying handle	15.99
RS-R8500	PC control soft w/RS-232 cable	80.99
SP-7	Small external speaker	94.99
SP-21	External speaker	119.99
UT-102	Voice synthesizer	74.99
*United States & state government agencies or a political subdivision thereof and communications utility companies and their legal agents ONLY may purchase unblocked models of R-2/R-3/R-5/R-10/PCR-100/PCR-1000/R-8500 for official government or communications utility company use only. Mail or FAX purchase order to AES. Experts: inquire.		
2m TRANSCEIVERS		
UT-101	DTMF unit for IC-2000H	..Δ \$ 28.99
IC-2100H-25N	50w 2m FM Xcvr/NEW TTP mic	169.99
CS-2100	DOS cloning software	13.99
OPC-478	PC RS-232C cable	45.99
CSW-2100	Win prog soft/cable; IC-2100H	50.99
HM-90A	Wireless microphone	119.99
BC-96	Wireless microphone holder	29.99
EX-1759	Infrared receiver	99.99
HM-133S	Extra TTP mic; 2100H/2100H25N	90.99
MB-17A	Quick release bracket	49.99
MB-28H	Extra mobile bracket	26.99
OPC-346	Extra 9.8' DC cable	28.99
OPC-347	23' DC cable	46.99
OPC-440	16.4' mic extension cable	85.99
OPC-441	16.4' speaker extension cable	33.99
OPC-474	Radio to radio cloning cable	18.99
OPC-589	8-pin mic jack adapter cable	35.99
OPC-647	8.2' mic extension cable	54.99
SP-10	Slim-line external speaker	69.99
IC-V8000	75w 2m FM Xcvr w/WX alert/scan	189.99
CS-V8000	Windows cloning software	35.99
OPC-478	PC RS-232C cable	45.99
OPC-478U	PC USB cable	60.99
OPC-347	23' DC cable	46.99
OPC-440	16.4' mic extension cable	85.99
OPC-441	16.4' speaker extension cable	33.99
OPC-474	Radio to radio cloning cable	18.99
OPC-589	8-pin mic jack adapter cable	35.99
OPC-647	8.2' mic extension cable	54.99
OPC-1132	9.8' DC cable	28.99
SP-10	Slim-line external speaker	69.99
UT-108	DTMF decoder unit	35.99
V8000-MMB	Extra mobile bracket	26.99
CS-207	DOS prog software; IC-207H	9.99
CSW-207/2710	Win cloning soft; 207/2710	29.99
OPC-601	23' separation cable; IC-207H	59.99
OPC-646	Prog cbl; CS-207/CSW-207/2710	89.99
RMK-3	Package; MB-58/OPC-600/OPC-647	79.99
UT-89	Tone scan/decode unit; IC-2350H	89.99
UT-104	Tone squelch unit; IC-2710H	89.99
IC-208H	55w 2m/50w 440 FM Xcvr	299.99
CS-208	Win cloning software	35.99
OPC-478	PC RS-232C cable	45.99
OPC-478U	PC USB cable	60.99
MB-17A	Quick release bracket	49.99
MB-58	Remote controller bracket	39.99
MB-65	Mounting base platform	35.99
OPC-347	23' DC cable	46.99
OPC-440	16.4' mic extension cable	85.99
OPC-441	16.4' speaker extension cable	33.99
OPC-474	Radio to radio cloning cable	18.99
OPC-589	8-pin mic jack adapter cable	35.99
OPC-601R	23' separation cable	67.99
OPC-647	8.2' mic extension cable	54.99
OPC-1132	9.8' DC cable	28.99
SP-10	Slim-line external speaker	69.99
IC-2720H	50w 2m/35w 440 FM Xcvr	369.99
CS-2720	Win/DOS cloning software	35.99

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AES Price

OPC-478 PC RS-232C cable	45.99
OPC-478U PC USB cable	60.99
MB-17A Quick release bracket	49.99
MB-84 Extra remote controller bracket	18.99
MB-65 Mounting base platform	35.99
MB-85 Combination bracket	25.99
OPC-347 23' DC cable	46.99
OPC-440 16.4' mic extension cable	85.99
OPC-441 16.4' speaker extension cable	33.99
OPC-474 Radio to radio cloning cable	18.99
OPC-589 8-pin mic jack adapter cable	35.99
OPC-647 8.2' mic extension cable	54.99
OPC-1132 9.8' DC cable	28.99
OPC-1156 11.5' separation cable	26.99
SP-10 Slim-line external speaker	69.99
CS-2800 Windows cloning software; 2800H Δ	12.99
OPC-872 Controller extension cable; 2800H Δ	19.99
UT-84 Tone squelch unit; IC-2700H/821H	89.99
IC-910H 100w 2m/75w 430 FM/SSB Xcvr	1099.99
PS-125 25A switching power supply	299.99
AG-25 2m mast mounted GaSFET preamp	159.99
AG-35 430 MHz mast mounted preamp	169.99
AG-1200 1.2 GHz mast mt preamp	159.99
AG-2400 2.4GHz mast mt down converter	499.99
CT-293 High stability stat unit	279.99
CR-17 CI-V level converter	129.99
FL-132 500 Hz main Rcvr CW filter	119.99
FL-133 500 Hz sub band Rcvr CW filter	119.99
MB-5 Mobile mount	59.99
MB-23 Side mount carrying handle	15.99
SM-20 Deluxe desk microphone	199.99
SP-7 Small external speaker	94.99
SP-10 Slim-line external speaker	69.99
UT-102 Voice synthesizer	74.99
UT-106 Plug-in DSP unit (one per band)	139.99
UX-910 10w 1.2GHz module	499.99
ID-1 10w 1.2GHz FM/128M digital Xcvr/ctl head	1349.99
AH-1080 10GHz parabola antenna	1099.99
AH-1415 1.2GHz colinear antenna	2169.99

Accessories for IC-2AT

BM-112U/BC-16U Wall cgr; 5A/7/8 only	Δ \$ 26.99
BP-4 Alkaline battery case	35.99
CP-1 Cig cgr; BP-3/7/8/DC cord	24.99
CP-11 Cig cord w/noise filter	39.99
DC-1 DC operation module	39.99
IC-72H Sport 6w 2m FM HT/battery holder	99.99
AD-81 Batt pack adapter for rapid charger	17.99
BC-110A/BC-74 Extra wall charger	40.99
BC-119-N01 Desk charger (adapter required)	84.99
BC-123 Drop-in trickle charger	39.99
BC-122A AC adapter for BC-133	16.99
BP-194 AA alkaline battery case	18.99
BP-195 9.6v 700mah nicad battery	42.99
BP-196 9.6v 1050mah nicad battery	39.99
CP-12L Rt angle cig charge cable w/filter	36.99
CP-17L Right angle cig cable for charger	24.99
CS-T2 DOS prog software for IC-T2	13.99
OPC-474 Cloning cable (T2 to T2)	18.99
OPC-478 PC RS-232C cable	45.99
CSW-HH4 Windows prog soft w/cable; T2	50.99
HM-46 Slim-line speaker/mic	45.99
HM-54 Hvy duty spkr/mic	79.99
HM-75A Remote control microphone	70.99
HM-128 Earphone+microphone	25.99
HM-131 Spkr/mic/earph jack/revolving clip	38.99
HS-51 Headset w/VOX	96.99
HS-94 Ear-piece style headset; use w/VS-1	24.99
VS-1 VOX-PTT unit for HS-94	42.99
LC-145 Carrying case for IC-T2	38.99
LCF3 Swivel Leather case with swivel	50.99
MB-68 Extra standard belt clip	5.99

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AES Price

MB-74 Spring loaded belt clip	12.99
MB-87 Swivel belt clip	9.99
OPC-254L Right angle mini DC chg cable	14.99
SP-13 Earphone	4.99
IC-V8 5.5w 2m FM HT/batt/cgr/TTP	124.99
AD-94-11 Adapter cup; BC-119-N01	17.99
BC-119-N01 Desk charger (adapter required)	84.99
AD-101 Batt adapt; BP-211/BC-119-N01	25.99
BC-144-01/21 Desk charger with adapter	89.99
BP-208 Battery case	18.99
BP-209 7.2v 1100mah 5.5w battery	53.99
BP-210 7.2v 1650mah 5.5w battery	80.99
BP-211 7.4v 1800mah lith ion battery	91.99
BP-222 7.2v 600mah 5.5w battery	35.99
CP-17L Right angle cig cable for charger	24.99
CS-V8 Cloning software for IC-V8	35.99
OPC-474 Cloning cable (V8 to V8)	18.99
OPC-478 PC RS-232C cable	45.99
OPC-478U PC USB cable	60.99
HM-46L Slim-line spkr/mic, rt angle plug	45.99
HM-54 Hvy duty spkr/mic	79.99
HM-75A Remote control microphone	70.99
HM-128L Rt angle plug earphone+mic	25.99
HM-131L Rt angle spkr/mic/earph jack/revolv clip	38.99
HS-51 Headset w/VOX	96.99
HS-94 Ear-piece style headset; use w/VS-1L	24.99
VS-1L Right angle VOX-PTT unit for HS-94	42.99
LCF3G Swivel Leather case with swivel	50.99
MB-68 Extra standard belt clip	5.99
MB-74 Spring loaded belt clip	12.99
MB-87 Swivel belt clip	9.99
OPC-515L Right angle DC cord for charger	20.99
SP-13 Earphone	4.99
UT-108 DTMF decoder unit	35.99
IC-T22A 3w 2m FM HT/batt/cgr/TTP	199.99
IC-T77H 6w 2m/440 FM HT/batt/cgr/TTP	179.99
IC-W32A 5w 2m/440 FM HT/batt/cgr/TTP	259.99
AD-51 Batt pack adapt; W32A/rapid cgr	9.99
AD-56 Batt pack adapt; T7H/T22A/rapid cgr	18.99
BC-119-N11 Nicad/NiMH desk cgr (adapt required)	89.99
BP-170 Battery case	35.99
BP-172 4.8v 950mah battery	91.99
BP-173 9.6v 600mah battery	99.99
BP-180 7.2v 600mah battery	83.99
CP-12 Cig lighter cable w/filter	36.99
CP-12L Right angle cig cable w/filter	36.99
CS-T7 DOS prog software for IC-T7H	13.99
CSW-32 DOS prog software for IC-W32A	13.99
OPC-474 Cloning cable W32A to W32A	18.99
OPC-478 PC RS-232C cable	45.99
CSW-HH4 Windows prog soft/cbl; T7H/W32A	50.99
FA-1443B Extra 2m/440 dual band duck	29.99
HM-46 Slim-line speaker/mic	45.99
HM-46L Slim-line spkr/mic, rt angle plug; T2A	45.99
HM-54 Heavy duty spkr/mic	79.99
HM-75A Remote control microphone	70.99
HM-128 Earphone+microphone	25.99
HM-131 Spkr/mic/earph jack/revolving clip	38.99
HS-10 Boom mic/headset	69.99
HS-10SA VOX unit	69.99
HS-10SB PTT switchbox	69.99
HS-85 Headset w/VOX	89.99
HS-94 Ear-pc headset; use w/VS-1	24.99
VS-1 VOX-PTT unit for HS-94	42.99
LC-125 Vinyl case; T2A w/BP170/171/172 D	2.99
LC-128 Vinyl case; IC-W32A	38.99
LC-136 Vinyl case; T7H w/BP170/171/172	38.99
LC-137 Vinyl case; T7H w/BP173/180	38.99
MB-30 Mobile/wall bracket	41.99
NCP-1 Nylon chest pack	39.99
OPC-254 Mini DC power cable	14.99

Icom - continued

AES Price

OPC-254L Right angle mini DC pwr cable	14.99
SP-13 Earphone	4.99
AD-87 Batt pack adapter; rapid cgr; T81A Δ	8.99
AD-88 PCB board; original BC-119-11	29.99
BC-119-N21 Nicad/NiMH desk cgr (use adapt; T81A)	89.99
BC-127A Extra nicad charger; IC-Q7	20.99
BP-197 Battery case for 3 AA; IC-T81A	24.99
BP-198 4.8v 700mah NiMH batt; IC-T81A Δ	39.99
BP-199 6v 700mah NiMH battery; IC-T81A Δ	59.99
BP-200L 9.6v 760mah NiMH battery; T81A Δ	79.99
CS-T81 Windows cloning soft; IC-T81A	13.99
LC-146 Carrying case; IC-Q7	22.99
LC-148 Carrying case; IC-T81A	19.99
OPC-782 Plug adapt cbl; HM46/HS85/SP13; Q7 Δ	16.99
IC-T90A 5w 6m/2m/440 HT/batt/cgr/lith	259.99
AD-92SMA SMA-BNC adapter	16.99
BC-139 Desk rapid charger	94.99
BP-216 Battery case for 2 AA	35.99
BP-217 7.4v 1300mah lith ion battery	89.99
CP-19R Cig lighter cable w/filter	44.99
CS-T90A Windows cloning software; IC-T90A	35.99
OPC-474 Cloning cable (radio to radio)	18.99
OPC-478 PC RS-232C cable	45.99
OPC-478U PC USB cable (Win XP only) ..	60.99
HM-46 Slim-line speaker/mic	45.99
HM-75A Remote control microphone	70.99
HM-128 Earphone+microphone	25.99
HM-131 Spkr/mic/earph jack/revolving clip	38.99
HS-85 Headset w/VOX	89.99
HS-94 Ear-pc headset; use w/VS-1	24.99
VS-1 VOX-PTT unit for HS-94	42.99
LC-152A Carrying case	24.99
MB-83 Swivel belt clip	9.99
SP-13 Earphone	4.99

Accessories for IC-2SAT/2SRA/24AT/W2A

AH-20 Replacement rcv ant; IC-2SRA	Δ \$ 24.99
BP-83 7.2v 600mah battery	79.99
BP-84 7.2v 1000mah battery	99.99
BP-90 AA alkaline battery case	35.99
IC-26XAT/HP 7w 2m HT/batt/cgr/TTP	Δ 249.99
AD-25 Battery charger adapter	49.99
AD-28 Batt pack adapt for rapid charger Δ	18.99
BC-119-N11 Nicad/NiMH desk cgr (adapt required)	89.99
BP-130A Battery case	35.99
BP-157A 7.2v 900mah battery	85.99
BP-174 12v 600mah battery	79.99
HM-46 Slim-line speaker/mic	45.99
HM-46L Slim-line spkr/mic, rt angle plug	45.99
HM-54 Heavy duty spkr/mic	79.99
HM-128 Earphone+microphone	25.99
HS-51 Headset w/VOX	96.99
HS-94 Ear-piece style headset; use w/VS-1	24.99
VS-1 VOX-PTT unit for HS-94	42.99
MB-30 Mobile/wall bracket	41.99
OPC-288 Mini DC power cable	19.99
SP-13 Earphone	4.99
AD-44 Batt adapter; rapid cgr; T21A	Δ 29

ACCESSORIES

AG-25 2m mast mounted GaSFET preamp	\$159.99
AG-35 430 MHz mast mounted preamp	169.99
AG-1200 1.2 GHz mast mt preamp	159.99
CT-17 CI-V level converter	129.99
HM-12 Scan hand microphone	74.99
MB-23 Side mount carrying handle	15.99
OPC-137 Adapter cable; older Icom Xcvr	19.99
PS-125 25A switching power supply	299.99
SM-6 Electret desk microphone	99.99
SM-20 Deluxe desk microphone	199.99
SP-5 Mobile speaker	49.99
SP-7 Small external speaker	94.99
SP-10 Slim-line external speaker	69.99

Icom - continued

SP-20 Speaker w/audio filter	239.99
SP-21 External speaker	119.99
Comic Book 1 The Adventure Begins (Zack & Max)	4.95
Comic Book 2 Lost in Seattle (Zack & Max)	4.95

CONSUMER ELECTRONICS

A-23 5w compact Navicom air handheld	\$399.99
IC-M1V Waterproof 5w VHF marine handheld	199.99
IC-M3A 5w VHF marine handheld w/AA nicads D	149.99
IC-M32 Waterproof 5w VHF marine handheld	149.99
IC-M302W02 White waterproof 25w VHF marine	159.99
IC-M402W02 White waterproof 25w VHF marine	199.99
M-710 (21) 150w HF marine SSB spec order	1399.99
AT-130 HF marine auto ant tuner spec order	449.99
M-802 150w DSP marine SSB Xcvr spec order	1749.99
IC-4088A Dlx family radio service handheld	89.99
BP-202 Nicad battery; IC-4008A/4088A	17.99
CP-18A Cig lighter cable	30.99
HM-46 Slim-line speaker/mic	45.99
HM-75A Remote controller microphone	70.99
HM-128 Earphone+microphone	25.99
HM-131 Spkr/mic/earph jack/revolving clip	38.99
HS-51 Headset w/VOX	96.99
HS-85 Headset w/VOX	89.99
HS-94 Ear-piece style headset; use w/VS-1L	24.99
VS-1 VOX-PTT unit for HS-94	42.99
IC-F21-GM 15 ch 4w GMRS/FRS handheld ...	149.99

IDI PRESS (IDI)

K-3 Logikey CW keyer	\$129.99
HK-3 Hook-up kit	10.99

International Ant (IAC)

160m double Bazooka 248' antenna	Δ \$214.99
160m double Bazooka Shorty 168' antenna Δ	199.99
80m double Bazooka 121' antenna	Δ 149.99
80m double Bazooka Shorty 84' antenna	Δ 159.99
40m double Bazooka 64' antenna	Δ 124.99
40m double Bazooka Shorty 40' antenna	Δ 119.99
160m-S 160m half sloper 127' antenna	Δ 139.99
80m-S 80m half sloper 67' antenna	Δ 109.99
40m-S 40m half sloper 33' antenna	Δ 69.99

IRON HORSE (See ATOC)**ISOTRON (ISO)**

160C 160m 9.5'x16"x15" 100 KHz bandwidth ant	\$173.99
80 80m 32"x16"x15" 110 KHz bandwidth ant	98.99
40 40m 22"x16"x15" 250 KHz bandwidth ant	88.99
20 20m 21"x8"x4" 350 KHz bandwidth ant	78.99
15 15m 21"x1.5"x4" 450 KHz bandwidth ant	78.99
10 10m 16"x1.5"x4" 1 MHz bandwidth ant	78.99
6 6m 16.5"x2"x4" 1.25 MHz bandwidth ant	78.99
80/40 Combo* 80/40m 32"x16"x30" ant	177.99
*Requires coaxial 'T's' & jumpers - not included	
20/15/10 Combo 20/15/20m combo ant	198.99

JR (JRP)

317275 X33 synth FM pisto/L-Z590M/L-Z270 75MHz	\$329.99
SP-100 C-1 fwd/rev speed control	64.99

K-COM (KCO)

RF-1 Modular telephone 3-30 MHz RFI filter	\$ 16.99
RF-1/Low Modular phone .5-3 MHz RFI filter	16.99
RF-1/2-line 2-line modular 3-30 MHz RFI filter	22.99
RF-1/coiled Coiled cord modular 3-30MHz filit	22.99
RF-2 Hard-wired telephone 3-30 MHz RFI filit	10.99
RF-2/Low Hard-wired phone .5-3 MHz RFI filit	10.99

KANTRONICS (KAN)

KPC-3 Plus/128K Small packet TNC/128K RAM	\$186.99
KPC-9612 Plus/128K 9600 controller/128K	349.99
(CSS) Pacterm 98 Software; Kantronics TNCs	79.99
12VDC Adaptor 300ma adaptor; KPC-3	12.99

Kantronics - continued

Host Master II+ IBM software	89.99
KAM 98 Single port multi-mode dig controller	399.99
(CSS) Pacterm 98 Software; Kantronics TNCs	79.99
12VDC Adaptor 300ma adaptor; KAM 98	12.99
KAM XL All mode TNC w/DSP modems	399.99
(CSS) Pacterm 98 Software; Kantronics TNCs	79.99
12VDC Adaptor 300ma adaptor; KAM XL	12.99
APRS adapter cable; GPS to Kantronics TNC	32.99

KENWOOD (KEN)

DRU-2 Dig recording unit; TS-950SDX	Δ \$139.99
SP-950 Ext spkr/audio filters; TS-950SDX	Δ 149.99
TS-B2000 PC ctl HF/6m/2m/430 Xcvtuner	1549.99
*UT-20 1.2GHz module Kenwood install only	1699.99
TS-2000X HF/6m/2m/430/1.2 Xcvtuner	2199.99
KPS-15 23A switching ps w/fan, 25A surge	149.99
PS-53 Heavy duty 22.5A power supply	249.99
ARCP-2000 PC control soft (inc w/TS-B2000)	82.99
DRU-3A Digital recording unit	129.99
MB-430 Mobile mounting bracket	49.99
MC-43S Extra 8-pin hand mic w/up-down	59.99
MC-57DM Back-lit TTP hand mic	79.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MC-80 8-pin electret desk mic/up-down .D	109.99
MC-90 2-head DSP desk microphone	239.99
PG-2Y 13' DC cable	39.99
PG-22 6.5' heavy duty DC cable	37.99
RC-2000 Remote faceplate mobile kit	349.99
SP-23 External speaker	89.99
VS-3 Voice synthesizer	39.99
TS-870S 9-band Xcvt/Rcvr/FDSP/tuner	1999.99
KPS-15 23A switching ps w/fan, 25A surge	149.99
PS-52 Heavy duty power supply	269.99
DRU-3A Digital recording unit	129.99
MC-43S Extra 8-pin hand mic w/up-down	59.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MC-80 8-pin electret desk mic/up-down .D	109.99
MC-90 2-head DSP desk microphone	239.99
PG-2Y 13' DC cable	39.99
PG-22 6.5' heavy duty DC cable	37.99
SO-2 TCXO unit	179.99
SP-31 External speaker	99.99
TS-480HX 200w HF/100w 6m Xcvt	1379.99
TS-480SAT 100w HF/6m Xcvt w/auto tuner	1269.99
PS-53 Hvy duty 22.5A ps (use 2 for 200w)	249.99
MC-43S Extra 8-pin hand mic w/up-down	59.99
MC-47 Multi-function 8-pin hand mic	59.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MJ-88 Modular to 8-pin mic adapter	30.99
PG-4Z 13' panel extension kit	59.99
PG-20 22' DC cable	49.99
SO-3 TCXO unit	109.99
SP-23 External speaker	89.99
SP-50B High quality external mobile spkr	55.99
VGS-1 Voice guide & storage unit	69.99
YF-107C 500 Hz CW filter	119.99
YF-107CN 270 Hz CW filter	119.99
YF-107SN 1.8 KHz CW filter	119.99
TS-570D(G) 9-band Xcvt/Rcvr/AFDSP/tuner/mic	989.99
TS-570S(G) 9-band Xcvt/Rcvr/AFDSP/tune/mic	1099.99
KPS-15 23A switching ps w/fan, 25A surge	149.99
PS-53 Heavy duty 22.5A power supply	249.99
DRU-3A Digital recording unit	129.99
MB-430 Mobile mounting bracket	49.99
MC-43S 8-pin hand mic w/up-down	59.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MC-80 8-pin electret desk mic/up-down .D	109.99
MC-90 2-head DSP desk microphone	239.99
PG-2Y 13' DC cable	39.99
PG-22 6.5' heavy duty DC cable	37.99
SO-2 TCXO unit	179.99

Kenwood - continued

SP-23 External speaker	89.99
SP-50B High quality external mobile spkr	55.99
VS-3 Voice synthesizer	39.99
YK-88C-1 500 Hz CW filter	129.99
YK-88CN-1 270 Hz CW filter	129.99
YK-88SN-1 1.8 KHz SSB filter	129.99
TS-50S Compact HF Xcvt/SW Rcvr/mic/mt D	649.99
KPS-15 23A switching ps w/fan, 25A surge	149.99
PS-53 Heavy duty 22.5A power supply	249.99
AT-50 External HF auto tuner	329.99
PG-4M 18' extension cable for AT-50	29.99
MC-47 Extra multi-func 8-pin hand mic	59.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MC-80 8-pin electret desk mic/up-down .D	109.99
PG-2Y 13' DC cable	39.99
PG-22 6.5' heavy duty DC cable	37.99
SO-2 TCXO unit	179.99
SP-23 External speaker	89.99
SP-50B High quality external mobile spkr	55.99
TC-50/50Case Travel case; TS-50S/60S	Δ 89.99
YK-107C 500 Hz CW filter	Δ 129.99
7-pin DIN plug	4.99
8-pin DIN plug	6.99
13-pin DIN plug	9.99
AT-50 External HF auto tuner	329.99
PG-4M 18' extension cable for AT-50	29.99
HS-5 Deluxe headphones	79.99
HS-6 Lightweight headphones	59.99
KPS-15 23A switching ps w/fan, 25A surge	149.99
LF-30A 1kw PEP low pass filter	64.99
MC-43S 8-pin hand mic w/up-down switch	59.99
MC-60A 8-pin amp desk mic w/up-down	149.99
MC-80 8-pin electret desk mic/up-down	109.99
MJ-88 Modular to 8-pin mic adapter	30.99
PG-3B 15A DC line noise filter	29.99
SP-50B High quality external mobile speaker	55.99
TU-7 Prog encoder; 2550/751A/TW-4100A	Δ 54.99
UT-10 1.2GHz 10w module for TS-790A	Δ 499.99
YF-455C-1 500 Hz CW filter; TS-450/690	Δ 149.99
TM-642AD 50w 2m/25w 220FM/backlit TTP mic	739.99
TM-742AD 50w 2m/35w 440 FM/backlit TTP	639.99
DFK-3 9' separate display cable kit	26.99
DFK-4 13' remote cable kit	59.99
DFK-7 Deluxe 22' remote cable kit	89.99
MJ-88 Modular to 8-pin mic adapter	30.99
PG-2N Extra DC cable	17.99
TSU-7 CTCSS decoder unit	59.99
SP-50B High quality external mobile spkr	55.99
UT-50S 50w 6m unit	329.99
UT-220S 25w 220 MHz unit	329.99
UT-440S 35w 440 MHz unit	299.99
UT-1200 10w 1.2 GHz unit	399.99
TM-D700A 50w 2m/35w 440 FM/1200/9600	519.99
MB-201 Extra mobile bracket	25.99
MJ-88 Modular to 8-pin mic adapter	30.99
PG-2N Extra DC cable	17.99
PG-4X 13' extension cable kit	69.99
PG-5A Packet data cable	15.99
SP-50B High quality external mobile spkr	55.99
VS-3 Voice synthesizer	39.99
TM-G707A 50w 2m/35w 440 FM/TTP mic	269.99
TM-V7A 50w 2m/35w 440 FM Xcvt/TTP mic	399.99
DFK-3C 9' separate display cable kit	44.99
DFK-4C 13' remote cable kit	64.99
DFK-7C Deluxe 23' remote cable kit	99.99
MB-201 Extra mobile bracket	25.99
MJ-88 Modular to 8-pin mic adapter	30.99
PG-2N Extra DC cable	17.99
PG-4S PC interface cable	32.99
PG-5A Packet data cable	15.99
SP-50B High quality external mobile spkr	55.99

Kenwood - continued AES Price

VS-3	Voice synthesizer	39.99
TM-541A	10w 1.2 GHz FM Xcvt/TTP/encoder	449.99
KQT-8/TSU-6	Prog CTCSS decoder	49.99
MB-201	Extra mobile bracket	25.99
PG-2N	Extra DC cable	17.99
SP-50B	High quality external mobile spkr	55.99
TM-541A	35w 440 FM Xcvt w/TTP mic	439.99
MB-201	Extra mobile bracket	25.99
MG-88	Modular to 8-pin mic adapter	30.99
PG-2N	Extra DC cable	17.99
SP-50B	High quality external mobile spkr	55.99
TSU-8	CTCSS decoder	59.99
TM-271A	60w 2m FM Xcvt w/WX alert	189.99
MG-88	Modular to 8-pin mic adapter	30.99
PG-2N	Extra DC cable	17.99
PG-5D	PC interface cable	79.99
SP-50B	High quality external mobile spkr	55.99
MC-450D	Multi-function modular TTP mic	19.99
MC-570D	Back-lit TTP mic; 241/331/441/541	79.99
MC-580D	Back-lit TTP mic; 251/733/742/255/7A	79.99
ME-1	Mem expansion; TH-28A/78A/TM-251A D	2.99
TH-22AT	5w 2m FM HT/batt/cgr/TTP	199.99
BT-9	4-AA battery holder	29.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
KSC-8A	Drop-in cgr; 25/26/75/77/22/42/79	26.99
KSC-14	2-pack rapid charger	59.99
PB-33	6v 1200mah battery	89.99
PB-34	9.6v 600mah 5w battery	89.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
TSU-8	CTCSS decoder; TH-22/42AT	59.99
WR-2	Water resistant bag; TH-22/42AT	29.99
TH-K2AT	5w 2m FM HT/batt/cgr/TTP	159.99
BT-14	6-AA battery holder	19.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
KSC-21	Boom mic headset	39.99
KSC-24	Rapid charger	46.99
PB-43N	7.2v 1100mah NiMH battery	44.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
PG-4V	Programming cable	32.99
SC-54	Soft case	16.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
WR-2	Water resistant bag; TH-22/42AT	29.99
TH-671A	5w 2m/440 FM HT/batt/cgr/TTP	229.99
TH-D7A(G)	5w 2m/440 FM HT/1200/9600 TNC	359.99
BT-11	Rapid charger	64.99
BT-11	4-AA battery holder	17.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
J29-0631-13	Belt clip for batt; D7A/G71A	4.99
PB-39	9.6v 600mah 5w battery	57.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
PG-4V	Computer control cable; TH-G71A	32.99
PG-4V	VC-H1 cable for TH-D7A(G)	49.99
PG-4W	PC software/cable; TH-D7A(G)	55.99
SC-45	Soft case for TH-G71A/PB-38/39	15.99
SC-47B	Black soft case for TH-D7A(G)	15.99
SC-470R	Orange soft case for TH-D7A(G)	15.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
WR-2	Water resistant bag	29.99

Kenwood - continued AES Price

TH-F6A	5w 2m/220/440 FM HT/lith ion batt	329.99
BT-13	AA battery case	25.99
EMC-3	Lapel clip mic/ear piece	29.99
HMC-3	VOX/boom mic headset	59.99
KHS-21	Boom mic headset	39.99
PB-42L	Extra 7.4v 1550mah lithium ion batt	79.99
PG-2W	DC cable w/fuse	17.99
PG-3J	Cig lighter cord w/filter	36.99
PG-4P	Computer control cable	32.99
SC-51	Soft case w/swivel belt clip	16.99
SMC-32	Mini water resist rt angle spkr/mic	52.99
SMC-33	Speaker/mic w/remote control	65.99
SMC-34	Spkr/mic w/vol cont/function keys	39.99
WR-2	Water resistant bag	29.99
E59-0407-08	16-pin DIN plug only; VCH-1	14.99
KCT-24S	VCH-1 to PC software/cable	29.99
SC-46P	Protective case for VCH-1	9.99

CONSUMER ELECTRONICS

KTC-H2A1*	Sirius portable satellite radio tuner	\$ 99.99
*Subscription required		
KPA-H2C	Car docking kit w/magnetic ant	29.99
KPA-H2H	Home docking kit w/desktop ant	49.99
TKM-707	150w HF marine SSB Xcvt spec order	1249.99
KAT-1	HF marine auto ant tuner	569.99
UBC-3	Nicad desk charger; UBZ-LH14BK	14.99
UPB-2	Nicad battery pack; UBZ-LH14BK	19.99
USC-5B	Black nylon case; UBZ-LH14BK	8.99

KESTER (KES)

82-5000-0004	.5 oz 60/40 solder, .040 dia	\$ 1.99
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KLEINHUIS (KLE)

1309	Isolated grounding bar	\$ 14.99
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KOSS (KOS)

KTX/8	Collapsible stereo phone w/vol control	\$ 14.99
QZ/5	Passive noise reduction stereo phone	49.99
QZ/50	Active noise reduction stereo phone	49.99
QZ/99	Noise reduction stereo phone w/mono sw	59.99
QZ/2000	Active noise reduction stereo phone	149.99
Y-88	Dual stereo phone Y-adaptor	4.99

KURANISHI (KUR)

BR-200	1.7-180MHz SWR/antenna analyzer	\$ 389.99
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LDG (LDG)

MP-Head	Remote head; AT-11MP	\$ 29.99
MP-AL-Cable	Ali interface cable; AT-11MP	9.99
MP-IC-Cable	Icom interface cbl; AT-11MP	9.99
AT-100Pro	160-6m 5-125w/50w 6m auto tuner	199.99
AC-1	Power & control interface	8.99
AL-IC1	Alinco 10' interface cable	20.99
Icom-IC1	Icom 10' interface cable	20.99
Icom-IC2	Icom 8' interface cable	8.99
K-OTT	Kenwood one-touch tune interface	59.99
RBA-1	Remote 4:1 balun; long/random/end fed	30.99
RBA-1:1	Remote 1:1 balun	30.99
Y-OTT	FT100/817/57/97 1-touch tune interface	59.99
AT-1000	1000w PEP HF/100w 6m auto tuner	549.99
RC-1000	Remote control for AT-1000	99.99
AT-897	Bolt-on auto tuner for Yaesu FT-897	199.99
RBA-1	Remote 4:1 balun; long/random/end fed	30.99
RBA-1:1	Remote 1:1 balun	30.99
MAC-600	Motorized antenna controller	139.99
AC-1	Power & control interface	8.99
AL-IC1	Alinco 10' interface cable	20.99
Icom-IC1	Icom 10' interface cable	20.99
Icom-IC2	Icom 8' interface cable	8.99
K-OTT	Kenwood one-touch tune interface	59.99
Y-OTT	FT100/817/57/97 1-touch tune interface	59.99
RT-11	160-6m .1-125w/50w 6m rem auto tuner	199.99
AL-IC1	Alinco 10' interface cable	20.99
Icom-IC1	Icom 10' interface cable	20.99

LDG - continued AES Price

Icom-IC2	Icom 8' interface cable	8.99
K-OTT	Kenwood one-touch tune interface	59.99
RBA-1	Remote 4:1 balun; long/random/end fed	30.99
RBA-1:1	Remote 1:1 balun	30.99
RT-Remote	RT remote head	39.99
AC-1	Power & control interface; RT-Remote	8.99
Z-11	160-10m 1-30w QRP auto ant tuner	149.99
RBA-1	Remote 4:1 balun; long/random/end fed	30.99
RBA-1:1	Remote 1:1 balun	30.99
Z-100	160-6m .1 to 125w/50w 6m auto tuner	149.99
AL-IC1	Alinco 10' interface cable	20.99
Icom-IC1	Icom 10' interface cable	20.99
Icom-IC2	Icom 8' interface cbl (use AC-1 also)	8.99
AC-1	Power & control interface	8.99
K-OTT	Kenwood one-touch tune interface	59.99
RBA-1	Remote 4:1 balun; long/random/end fed	30.99
RBA-1:1	Remote 1:1 balun	30.99
Y-OTT	FT100/817/57/97 1-touch tune interface	59.99

LA CROSSE (LAC)

WS-2100	Professional wireless weather stn	\$ 389.99
WS-2010-13	PC interface/software	129.99
WS-2310	Wireless/wired weather center	249.99
WS-7013U	Wireless temperature station	24.99
WS-7038UF	Wireless rain gauge	59.99
WS-7075UF	Wireless forecast station	59.99
WS-8017U-Oak	Atomic clock w/in/out temp	39.99
WS-8025AL	Dix sun/moon wireless WX station	159.99
WS-9016U	Sun/moon wireless weather stn	79.99
WT-5431	Projection alarm w/remote temp	49.99
TX-3U	Extra temp sensor w/LCD; all WX units	15.99
3362U	Power cost controller	29.99
IR-101	Infrared thermometer	49.99
RS-204U	Remote control outlet	29.99

LAKEVIEW (LAK)

9175	75m 7' Hamstick antenna	\$ 24.99
9140	40m 7' Hamstick antenna	24.99
9130	30m 7' Hamstick antenna	24.99
9120	20m 7' Hamstick antenna	24.99
9117	17m 7' Hamstick antenna	24.99
9115	15m 7' Hamstick antenna	24.99
9112	12m 7' Hamstick antenna	24.99
9110	10m 7' Hamstick antenna	24.99
9106	6m 4.5' Hamstick antenna	24.99
901	Dipole mount for 2 Hamsticks	14.99
IM-1	Induct-match for 75-12m mobile ant	17.99
TM-1	License plate mount, 3/4-24	44.99
TM-1-Plus	License plate mount, SO-239	34.99

LARSEN (LAR)

27-31 MHz ANTENNAS		
NMO-27B	10m black ant only (no mount)	\$ 36.99
NMO-27C	10m ant only (no mount)	32.99
47-54 MHz ANTENNAS		
NMO-50B	6m black ant only (no mount)	\$ 36.99
NMO-50C	6m ant only (no mount)	32.99
144-174 MHz ANTENNAS		
NMO-150B	2m black ant only (no mt), 3 db	\$ 33.99
NMO-150C	2m ant only (no mount), 3 db	30.99
220-265 MHz ANTENNAS		
NMO-220B	220 black ant only (no mt), 3 db	\$ 36.99
NMO-220C	220 ant only (no mount), 3 db	30.99
440-460 MHz ANTENNAS		
NMO-440B	440 black ant only (no mt), 4.5db	\$ 35.99
NMO-440C	440 ant only (no mount), 4.5 db	29.99
MM-270PL	2m/440 1/4 wave/2db mag mt ant	50.99
NMO-270B	2m/440 blk ant only (no mt), 2/4db	65.99
NMO-270C	2m/440 blk ant (no mount), 2/4db	60.99
NMO-270-SH	2m/440 ant (no mt), 1/4 wv/2db	40.99
NMOQ-Spec	136-512 MHz 1/4 wave ant (no mt)	13.99

Larsen - continued

NMQQ-Spec-B 136-512 black ¼" wv ant (no mt)	15.99
NMQQ-Spec-K 136-512MHz ¼" wv ¾" hole ant	28.99
NMQQ-270-B 2m/440 ¼" wv cell look ant (no mt)	36.99
GPS-NMQ02 GPS NMO mount ant (no mt)	69.99
NMO-150450800 3-band scanner ant (no mt)	29.99

ON GLASS ANTENNAS

KG-144-UD-PL 2m 3 db on glass antenna	\$ 83.99
KG-220-UD-PL 220 3 db on glass antenna	83.99
KG-440-UD-PL 440 2.4 db on glass antenna	71.99
KG-270-CX-PL 2m/440 2.5/4.5db on glass	116.99
KG-Reinstall Reinstall kit for KG-ants	8.99

KULDUCKIES - For Hand-helds

KD4-2/70 2m/440 BNC Kulduckie	\$ 36.99
KD4-222 220 BNC Kulduckie	Δ 14.99
KD14-445 440 ¼ wave BNC Kulduckie	19.99
KD4-146-HQ 2m part helical, part ¼ wave BNC	25.99
KD14-2M-HW 2m ½ wave BNC antenna	38.99
KD14-440-HW 440 ¼ wave BNC antenna	Δ 19.99

ACCESSORIES

BSA-K Base mt kit; NMO/UHF mt mobile ant	\$ 53.99
NMO-B38 NMO mt hdw/A-7 NLA adapter	13.99
NMO-K ¾" hole mt w/coax for NMO ant	15.99
NMO-MM Magnet mt, coax for NMO ant	32.99
NMO-TLP Low profile tnlk idt mt, coax; NMO ant	29.99
P0-K Roof mt, coax for SO-239 ant	30.99
P0-MM Magnet mt, coax for SO-239 ant	36.99
P0-TLM Trunk lip mt, coax for SO-239 ant	Δ 12.99
RG-SS Extra super seal NMO gaskets (3)	5.99
SPRING Shock spring	10.99
TMB-34 Trunk mtg bkt for NMO antenna	5.99
TMB-34B Black trunk mtg bkt for NMO ant	7.99
W-270B 2m/440 black replacement whip	27.99
W-490 49" replacement whip	8.99
W-490B Black 49" replacement whip	12.99

LIGHTWAVE (LIG)

LW-HT 4 LED/3 AA-cell illuminator head torch	\$ 39.99
LW-PB 1 LED/2 lith-cell pocket flashlight	19.99
LW-2000 4 LED/3 AA-cell flashlight	29.99
LW-3000 7 LED/3 C-cell flashlight	49.99
LW-4000 10 LED/3 D-cell flashlight	59.99

LOGSAT (LOG)

Logsat Professional Satellite tracking CDROM	\$ 69.99
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LOSI (LOS)

A0014 XXX-4 4WD electric Competition buggy kit	\$269.99
A0090 XXX-T Sport RTR w/XR2i electric car	269.99

M² (MSQ)

KT-36XA 20/15/10m 6el 32' boom beam	1299.99
40M-1LXD 6.9-10m rotatable dipole	499.99
20M-4DX 20m 7.4db 4el 34' boom beam	599.99
17M-3DX 17m 6.3db 3el 18' boom beam	Δ 399.99
17M-5DX 17m 8.6db 5el 36' boom beam	Δ 499.99
15M-4DX 15m 8.5db 4el 33' 8" boom beam	499.99
12M-4DX 12m 8.6db 4el 27' boom beam	Δ 399.99
10M-4DX 10m 8.7db 4el 23' boom beam	449.99
6M-3 6m 50-50.6 or 51-54.64db 3el 69" boom beam	149.99
6M-5X 6m 50-50.5 or 51-54.94db 5el 18" boom beam	249.99
6M-7JHW 6m 50-50.4 10.9db 7el 30" 8" boom beam	299.99
6M-2WLC 6m 49-7.50.5 11.9db 9el 39' 6" boom T*	499.99

*6M-2WLC is drop-shipped (shipped direct to you from the M² factory). As these factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Fresno, California via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order items.

M² - continued

6M-9KHW 6m 50-50.4 12.7db 9el 49' 4" boom beam	Δ 499.99
6M-HO-LOOP 6m 50-50.3 4.4db horiz loop ant	113.99
6" x 1/2" 3/8-24 mobile mast for loop	10.99
16" x 1/2" 3/8-24 mobile mast for loop	12.99
18" x 5/8" 3/8-24 mobile mast for loop	17.99
36" x 1/2" 3/8-24 mobile mast for loop	28.99
50" x 1/2" 3/8-24 mobile mast for loop	31.99
MAST BKT KIT For 6M-HO-LOOP	Δ 14.99
MAst/Top Bkt Mast & top bracket; HO stack	19.99
2M-4 2m 7.5db 4el 4' boom beam	113.99
2M-7 2m 10.3db 7el 8' 10" boom beam	127.99
2M-9FM 2m 145-148 12db 9el 14' 6" boom beam	149.99
2M-9SSB 2m 144-146 12db 9el 14' 6" boom beam	149.99
2M-12 2m 12.8db 12el 19' 6" boom beam	199.99
2M-5WL 2m 14.8db 17el 33' boom beam	249.99
2M-18XX 2m 144-146 15.3db 18el 36" 3" boom beam	289.99
2M-8WLD 2m 144-144.7 17db 21el 55' boom beam	599.99
2M-CP14 2m 10.3db 7h/7v 10' 6" boom beam	215.99
2M-CP22 2m 12.5db 11h/11v 18' 6" boom beam	289.99
PS-2M 2m polarity switch; circ pol beam	169.99
FG X-Boom Kit For circular antennas, etc.	159.99
2M-XP20 144-146 13.3db 10h/10v cross polar	Δ 169.99
2M5-440XP 2m/440 9/12db 5/10el 5' 8" boom beam	199.99
2M-HO-LOOP 2m 144-144.5 4.86db horiz loop	49.99
6" x 1/2" 3/8-24 mobile mast for loop	10.99
16" x 1/2" 3/8-24 mobile mast for loop	12.99
18" x 5/8" 3/8-24 mobile mast for loop	17.99
36" x 1/2" 3/8-24 mobile mast for loop	28.99
50" x 1/2" 3/8-24 mobile mast for loop	31.99
Big-Foot 4x-mag mt; 2M-HO-LOOP stack/etc	119.99
MAG-KIT Magnet mt kit; single 2m-HO-LOOP	24.99
MAST BKT KIT For 2M-HO-LOOP	Δ 14.99
Mast/Top Bkt Mast & top bracket; HO stack	19.99
STACK-KIT Stack kit for 2m-HO-LOOP's	74.99
TOP BKT KIT For 2M-HO-LOOP	Δ 19.99
EB-144/RK-2M 2m Eggbeater w/reflector kit	199.99
222-7EZ 220 9.8db 7el 5' 8" boom beam	109.99
222-10EZ 220 12db 10el 9' 9" boom beam	125.99
222-5WL 220 15.2db 15el 23' 3" boom beam	199.99
222-7WL 220 16.4db 23el 32' 5" boom beam	249.99
222-XP30 220 15.2db 15h/15v cross polar	Δ 169.99
222-HO-LOOP 220-224 4.75db horiz loop ant	49.99
6" x 1/2" 3/8-24 mobile mast for loop	10.99
16" x 1/2" 3/8-24 mobile mast for loop	12.99
18" x 5/8" 3/8-24 mobile mast for loop	17.99
36" x 1/2" 3/8-24 mobile mast for loop	28.99
50" x 1/2" 3/8-24 mobile mast for loop	31.99
MAG-KIT Magnet mt kit; single 222-HO-LOOP	24.99
Mast/Top Bkt Mast & top bracket; HO stack	19.99
440-470-5W 440-470 7.8db 5el 2' 2" boom beam	149.99
420-50-11 432 11.3db 11el 5' boom rear mt beam	109.99
440-18 432 14.5db 18el 11' 4" boom beam	149.99
440-21ATV 432 15.9db 21el 14' 6" boom ATV beam	169.99
436-CP30 432 14.5db 15h/15v 9' 9" boom beam	289.99
436-CP42U 432 16.8db 21h/21v 18' 10" boom beam	329.99
PS-70CM 432 polarity switch; circ pol beam	169.99
FG X-Boom Kit For circular antennas, etc.	159.99
432-9WL 432 17.3db 28el 21' boom beam	199.99
432-13WLA 432 18.6db 38el 30' 8" boom beam	269.99
432-HO-LOOP 430-436 5db horiz loop ant	49.99
6" x 1/2" 3/8-24 mobile mast for loop	10.99
16" x 1/2" 3/8-24 mobile mast for loop	12.99
18" x 5/8" 3/8-24 mobile mast for loop	17.99
36" x 1/2" 3/8-24 mobile mast for loop	28.99
50" x 1/2" 3/8-24 mobile mast for loop	31.99
Big-Foot 4x-mag mt; 432-HO-LOOP stack/etc	119.99
MAG-KIT Mag mt kit; single 432-HO-LOOP	24.99
Mast/Top Bkt Mast & top bracket; HO stack	19.99
STACK-KIT-70CM Stack kit; 2 432-HO-LOOP's	74.99
TOP BKT KIT For 432-HO-LOOP	Δ 19.99
EB-432 432 Eggbeater omni/hor/rhc overhead	Δ 119.99

M² - continued

EB-432/RK-70CM 432 Eggbeater w/reflector kit	189.99
902-6W 900MHz 10db 6el 2' boom beam	Δ 59.99
902-10EZ 900MHz 12.6db 10el 3' 5" boom beam	Δ 79.99
902-18EZ 900MHz 14.8db 18el 5' 4" boom beam	159.99
23CM-22EZA 1.2GHz 16db 22el 5' 2" boom beam	149.99
23CM-35 1.2GHz 18.4db 35el 10' boom beam	189.99
2M-2-Port-PD 2m 2-port type N power divider	69.99
70CM-2-Port-PD 432 2-port type N power divider	69.99
23CM-2-Port-PD 1.2GHz 2-port N power divider	69.99
FAST MAST 20' extended port alum mast	Δ 129.99
OR-2800PDC 35 sq ft azimuth rotor/control 8-wire	1399.99
RC-2800PP Control box; prop pitch spec order	549.99

MFJ (MFJ)

ANTENNA TUNERS

989C Dlx 1.2kw PEP w/roller inductor	\$319.99
986 1.2kw PEP w/roller inductor	299.99
962D 1.5kw PEP/meter/switch/balun/roller ind	249.99
969 HF & 6m 300w roller inductor tuner	189.99
949E 300w/PEP meter/dummy/switch/balun	139.99
948 300w/meter/switch/balun	119.99
941E 300w tuner w/meter, switch, balun	109.99
945E 300w tuner w/meter plus 6m	99.99
20 Mobile bracket for 945E	4.99
901B Versa Tuner 200w ant tuner	79.99
910 80-10m mobile antenna matcher	19.99
16010 200w random wire tuner	49.99
974 3.5-54MHz balanced line ant tuner	169.99
974H 1.8-54MHz balanced line ant tuner	189.99
991 150w automatic antenna tuner	199.99
993 300w deluxe automatic antenna tuner	239.99
994 600w automatic antenna tuner	329.99
5124A Alinco interface cable; auto tuners	15.99
5124I Icom interface cable; auto tuners	15.99
902 80-10m 150w travel tuner	79.99
903 6m antenna tuner	49.99
906 6m antenna tuner w/wattmeter	79.99
914 Auto tuner extender	59.99
921 2m/220 300w PEP tuner/SWR/wattmeter	69.99
922 2m/440 150w tuner/SWR/wattmeter	79.99
924 440 MHz 300w PEP tuner/SWR/wattmeter	69.99
934 300w tuner w/artificial ground	169.99

MEMORY KEYS

451 Dedicated CW keyboard w/memory	\$ 99.99
452 CW keyboard/keyer w/disp/keyboard	129.99
452X CW keyboard/keyer w/disp, no keyboard	99.99
498 Dlx CW keyboard/keyer w/disp/keyboard D	169.99
490 492 keyer/Bencher paddle combo	189.99
490X 492 keyer for use w/Bencher or 564	99.99
564 Deluxe iambic paddle for 490X	49.99
492 192 char menu driven memory keyer	89.99
495 Millennium memory keyer	149.99
493 32K char menu driven memory keyer	Δ 129.99
5409 9-pin serial port 6' cable for 493	Δ 2.99
5425 25-pin serial port 6' cable for 493	Δ 4.99

ELECTRONIC KEYS

407D Deluxe electronic keyer	\$ 69.99
401D Econo keyer	49.99

KEYER/PADDLES

422D Keyer/Bencher paddle combination	\$159.99
422DX Keyer only	79.99
441 SlimLine econo keyer	59.99
442 SlimLine keyer/Bencher paddle combo	149.99
442X SlimLine keyer only	Δ 49.99
447 SlimLine deluxe keyer	79.99
564 Deluxe iambic chrome paddle	49.99
564B Deluxe iambic black paddle	49.99

COMPUTER INTERFACES

1224 Interface	\$ 99.99
1285 Software for IBM; 1224	19.99

MFJ - continued

1270C Packet radio TNC2	159.99
1278B Multi-mode controller w/Pactor	279.99
1278B/DSP Controller w/Pactor & DSP	359.99
48 1278 upgrade	24.99
52 TNC2 deviation meter board	14.99
780 DSP data filter for 1278B	49.99
1284D 1284 disk only	.29
1284M 3 1/2" IBM starter pack	19.99
1284W MFJCOM for Windows	29.99
1287D 1287 disk only	.09
1289M 3 1/2" multicom software for IBM	49.99
1289W Multicom for Windows with cable	59.99
1289W Multicom for Windows, less cable	49.99
1214PC Multimode interface for IBM	139.99
781 DSP filter for any TNC or controller	69.99
1272B TNC to microphone interface	39.99
1272BYH TNC/mic switch; KAM HF	39.99
1272BYV TNC/mic switch; KAM VHF	39.99
1272M TNC/mic RJ-45 switch; MFJ/PK-900	39.99
1272MVV TNC/mic RJ-45 sw; KAM VHF; KPC3	39.99

SSB/CW FILTERS

722 SSB/CW notch filter	\$ 49.99
751B Super tunable CW audio filter	69.99
752C Dual tunable SSB/CW filter	89.99
784B Deluxe tuneable DSP filter	229.99
5184 Cable pack for 784B	7.99

PHONE PATCH

624D Phone patch w/audio VU meter	\$119.99
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DUMMY LOADS

250 2kw PEP dummy load w/oil	\$ 59.99
250X 2kw PEP dummy load, less oil	39.99
21 1 gal industrial xfmr oil for wet dummy	24.99
260C 300w 0-650 MHz dry dummy load	34.99
260CN 300w 0-650 MHz type N dry dummy	39.99
264 1.5kw 0-650 MHz dry dummy load	69.99
264N 1.5kw 0-650 MHz type N dry dummy	74.99
267 1.8-54 100w dry dummy load/SWR/wattmeter	139.99

SWR/WATTMETERS

812B 144-220 MHz SWR/FS/wattmeter	\$ 34.99
815B 160-6m cross-needle SWR/wattmeter	79.99
816 1.8-30 MHz toroidal SWR/wattmeter	34.99
817 2m/440 cross needle meter	39.99
841 2m 5w in-line HT wattmeter/SWR	89.99
844 Compact 2m/440 SWR/wattmeter	69.99
860 1.8-60 MHz cross-needle meter	44.99
862 2m/220/440 cross-needle meter	54.99
864 1.8-60MHz/2m/440 cross needle meter	84.99
870 1.6-60MHz Grandmaster SWR/wattmeter	124.99
872 1.8-200MHz Grandmaster SWR/wattmeter	94.99
873 125-525MHz Grandmaster SWR/wattmeter	104.99
874 1.8-525MHz Grandmaster SWR/wattmeter	159.99

SHORTWAVE ACCESSORIES

306 Car radio SWL converter	\$ 89.99
956 LW/MW/SW preselector/tuner	49.99
959C SW receiver ant tuner w/preamp	99.99
1020C .3-30 MHz indoor active receive ant	79.99
1022 300KHz-200MHz active rcv antenna	49.99
1024 .05-30 MHz outdoor active rcv ant	129.99
1040B Deluxe receiver preselector	99.99
1045C Receiver preselector	69.99

BOOKS

30 Golden Classics book	\$ 9.95
32 Packet Made Easy book	9.95
33 Mobile Handbook book	12.95
36 Shortwave Listeners Guide; Apts/Condos	9.95
37 Ham Communications Circuit Files book	9.95
38 Easy-up Antennas book	16.95
3036 The Packet Radio Operators book	12.95
3101 Fox Hunt Adventure book	7.95
3211 Technician license guide	9.95

AES Price**MFJ - continued**

3213 General license guide	9.95
3301 Troubleshooting Antenna & Feedlines book	12.95
3302 73 Dipole and Long-Wire Antennas	12.95
3303 73 Vertical, Beam, and Triangle Ants	12.95
3305 Antennas & Transmission Lines book	19.95
3400 Morse Code: Breaking the Barrier	19.95
3502 Solid State QRP Projects	12.95
3504 FET Principles, Experiments & Projects	16.95
3506 Ferromagnetic-Core Design book	19.95
3507 Practical RF Design Manual	19.95
3508 Radio Components Handbook	D 9.99
3509 Ladder Crystal Filters	19.95

CLOCKS

105C 24-hour quartz wall clock	\$ 19.99
107B 24-hour digital clock	9.99
108B 24/12-hour dual disp digital clock	19.99
112B Deluxe world map clock	24.99
113 24/12-hr 1.8" LED clock/batt back-up	19.99
115 DX'er 24-hour analog world wall clock	24.99
1160C 12-hour 12vdc LED clock	9.99
118 Giant 24/12 hour LCD clock	24.99
123 Eternity solar atomic clock	79.99
125 Calendar 24-hour analog wall clock	29.99

ANTENNAS

343 1 1/4" hole mount for 3/8-24 whip	\$ 9.99
1402 2m/440 0/3db 16.5" 100w ant only	34.99
1412 2m/440 3/5.5db 40" 200w ant only	49.99
1422 2m/440 3/2.5/7db 41.5" 150w ant only	49.99
1432 2m/440 4/5.7db 62.5" 150w ant only	69.99
1436 6m/2m/440 2.15/4.5/7.2db 59" ant only	79.99
3338M 3.5" HiFlux NMO mag mt; not 1436	14.99
3338S 3.5" HiFlux SO-239 magt mt not 1436	14.99
3358M 5" HiFlux NMO mag mt; not 1436	19.99
3358S 5" HiFlux SO-239 mag mt; not 1436	19.99
340 Mirror/luggage pipe clamp mount	34.99
345 Trunk/hatchback lip mount SO-239 mt	34.99
1516 2m 15' vertical base antenna	89.99
1621 40-10m 54" portable ant w/tuner	89.99
1622 40-2m apartment antenna	89.99
1624 40-6m mini bugcatcher antenna	79.99
1661 40-2m portable manual screwdriver ant	109.99
1664 80-6m portable manual screwdriver ant	139.99
1710 2m 3/4 wave telescopic antenna	9.99
1712 2m/440 telescopic antenna	14.99
1713 2m/440 SuperFlex Thin Duk HT ant	19.99
1713S 2m/440 SuperFlex SMA Thin Duk ant	19.99
1714 2m 3/4 wave telescopic antenna	16.99
1715 2m/440 SuperFlex gain Thin Duk HT ant	24.99
1715S 2m/440 SuperFlex gain SMA Thin Duk	24.99
1716 2m/440 duck for HT	16.99
1716S 2m/440 SMA duck for HT	16.99
1717 2m/2.15db 440 duck for HT	21.99
1717PL 2m/440 foldover flexi-duck, PL-259	24.99
1717S 2m/2.15db 440 SMA duck for HT	21.99
1719 2m/440/1.2GHz Midget Duck	19.99
1719S 2m/440/1.2GHz SMA Midget Duck	19.99
1720S 6m/2m/440 SMA duck	29.99
1721 2m HT UltraLite mag mt antenna	14.99
1722 2m/440 HT UltraLite mag mt antenna	18.99
1724B 2m/440 magnet mt antenna	16.99
1727 10m magnet mt antenna	D 29.99
1728B 6m 3/4 wv/2m 3/4 wv mag ant/PL259/BNC	29.99
1729 2m/440 magnet mt antenna	34.99
1730 2m pocket roll-up vertical antenna	19.99
1734 2m/440 2.6/3db glass mt antenna	39.99
1736 6m J-Pole travel antenna	29.99
1738 2m 2.6db glass mt antenna	29.99
94 Remount kit for 1734/1738	4.99
1740 2m 3/4 wave ground plane ant	19.99
1750 2m 3/4 wave ground plane ant	24.99
1752 220 3/4 wave ground plane ant	24.99

AES Price**MFJ - continued**

1754 2m/440 ground plane antenna	29.99
1756 6m DX vertical antenna	59.99
1762 6m 6db 3 el 6' boom beam	79.99
1763 2m 3el portable beam	44.99
1764 2 & 6m dual 3/4 super gain base ant	49.99
1768 2m/440 4/7 el beam antenna	79.99
1778 GSRV 160-10m 102' ant (needs tuner)	39.99
1786 Super Hi-Q 10-30 MHz loop/dlx control	349.99
1788 Super Hi-Q 40-15m loop/dlx controller	389.99
1796 40/20/15/10/6/2m 10' vertical ant	189.99
1798 80/40/30/20/17/15/12/10/6/2m 20' vert	269.99
1899T 80-6m telescopic antenna for FT-817	129.99
1910 33' telescoping fiberglass mast	79.99

CABLES

5020 MFJ TNC - Yae FT50R/compat	\$ 15.99
5020YV KAM VHF/KPC3 - Yae FT50R/compat	15.99
5022 MFJ TNC - Alinco/Standard HT cable	12.99
5022YV KAM VHF/KPC3 - Ali/Sta HT cable	15.99
5024 MFJ TNC - Ico/Yae/Al/RS HT cable	15.99
5024B PK/PacComm/compat - Ico/Yae/RS	15.99
5024YV KAM VHF/KPC3 - Ico/Yae/Al/RS HT	15.99
5026 MFJ TNC - Kenwood HT cable	15.99
5026YV KAM VHF/KPC3 - Kenwood HT cable	15.99
5060 MFJ TNC - Ken/Yae acc 6-pin mini DIN	19.99
5060YV KPC9612 - Ken/Yae acc 6-pin mini DIN	19.99
5060YV KAM VHF/KPC3 - Ke/Ya acc 6-pin mini DIN	19.99
5063 MFJ TNC - Icom HF acc 8-pin DIN	19.99
5063YH KAM DIN HF - Icom HF acc 8-pin DIN	19.99
5064 MFJ TNC - Icom HF acc 8-pin DIN	19.99
5064YV KPC9612 - Icom VHF 8-pin DIN	9.99
5065 MFJ TNC - Ico IC-706 acc 13-pin DIN	19.99
5065YH KAM HF - Ico IC-706 acc 13-pin DIN	19.99
5065YV KAM VHF - Ico IC706 acc 13-pin DIN	19.99
5066 MFJ TNC - Kenwood HF acc 13-pin DIN	19.99
5066YH KAM HF - Ken HF acc 13-pin DIN	19.99
5080 MFJ TNC - Yaesu 8-pin cable	15.99
5080M MFJ TNC - Yaesu 8-pin modular	15.99
5080MYH KAM VHF/KPC3 - Yae 2500M/7400H	15.99
5080YV KAM HF port - Yaesu 8-pin cable	15.99
5080YV KAM VHF/KPC3 - Yaesu 8-pin cable	15.99
5082 Open end - 8-pin mic cable	9.99
5084 MFJ TNC - Icom 8-pin cable	15.99
5084M MFJ TNC - Icom 8-pin modular	15.99
5084MYH KAM VHF/KPC3 - Icom 8-pin mod	15.99
5084YV KAM HF port - Icom 8-pin cable	15.99
5084YV KAM VHF/KPC3 - Icom 8-pin cable	15.99
5086 MFJ TNC - Kenwood/Alinco 8-pin cable	15.99
5086M MFJ TNC - Kenwood 8-pin modular	15.99
5086MYV KAM VHF/KPC3 - Ken 8-pin mod	15.99
5086YH KAM HF port - Ken/Al/RS HT cable	15.99
5086YV KAM VHF/KPC3 - Ken/Al/RS HT cable	15.99
5088 MFJ TNC - Radio Shack 8-pin modular	15.99
5205 5-pin DIN open end cable	4.99
5208 Open end - Ico HF/VHF acc 8-pin DIN	9.99
5213 Open end - Kenwood acc 13-pin DIN	9.99
5220R/5220 Open end - Yae FT50R/compat	9.99
5222 Open end - Ali split HT cable	9.99
5224 Open end - Ico/Yae/Al/RS HT cable	9.99
5268 Open end - modular phone plug cable	9.99
5412 IBM printer cable	9.99
5413 RS-232 6' cable DB-25M-25F	9.99
5414 RS-232 6' cable DB-25M-9F	9.99
5803/10 3' coax jumper cable	5.99

RADIOS/TRANSCIVERS

8100K Shortwave regenerative Rcvr kit	\$ 69.99
8100W Shortwave regenerative Rcvr wired	89.99
9606X 10w 6m FM/data Xcvr/mic/52.525MHz	139.99
8621 5w 2m data radio w/145.01 MHz	139.99
8621X2 5w APRS ready 2m data radio/144.39	149.99
4110 Portable AC power supply	49.99
5100 Data radio cable - MFJ/TAPR	15.99

MFJ - continued

AES Price

5100YH Data radio cable - KPC-9612	9.99
5100YV Data radio cable - KAM/KPC-3	15.99
5106 Open end - 6pin mini Ken/Yae cable	4.99
8708 4ch ham micro ATV transmitter	149.99
9015 5w 15m CW Xcvr	169.99
9020 5w 20m CW Xcvr	169.99
9030 5w 30m CW Xcvr	169.99
9040 5w 40m CW Xcvr	169.99
27 Handle for CW station	4.99
412 Plug-in Curtis keyer	49.99
726 Plug-in audio filter	29.99
971 200w portable ant tuner w/meter	99.99
1772 Portable 20m dipole	39.99
1774 Portable 40m dipole	39.99
4110 Portable AC power supply	49.99
4114 Rechargeable power pack	69.99
91308 9030 Xcvtuner/ps/ant package	229.99
91408 9040 Xcvtuner/ps/ant package	249.99
9402X 7w PEP 2m SSB Xcvt w/mic	269.99
9406X 10w PEP 6m SSB Xcvt w/mic	249.99
9410X 20w PEP 10m SSB Xcvt w/mic	239.99
9420X 12w 20m SSB Xcvt w/mic	229.99
9440X 12w 40m SSB Xcvt w/mic	229.99
9475X 12w 75m SSB Xcvt w/mic	229.99
415B SSB Xcvt CW adapter; 9420X/9440X	49.99
416 CW adapter for 9402X/9406X/9410X	49.99
971 200w HF portable ant tuner w/meter ..	99.99
1770A 10m dipole for 9410X	39.99
4110 Portable AC power supply	49.99
4114 Rechargeable power pack	69.99

ACCESSORIES

1305 5v 300ma adapter	D \$ 2.99
1306 6v 300ma adapter	12.99
1312 12vdc 300ma adapter, 2.5mm plug	14.99
1312D 12vdc 500ma adapter, 2.1mm plug ..	14.99
1316 12vdc 1.5A adapter	19.99
10-BCI-2 Charger cup; lcom BP-131/132	29
10-BCI-3 Charger cup; lcom BP-173/180	29
10-BCY-2 Cgr cup; Yae FNB10/11/12/17/27	29
15 HamGear belt loop radio holder	14.99
18 HamGear chest harness/cargo pocket	29.99
92AA01 1300ma AA NiMH cell	each 2.99
92AA10 10-pack 1300ma AA NiMH cells	24.99
201 1.5-250 MHz dip meter	109.99
202B RF noise bridge	59.99
204B HF Antenna bridge	79.99
206 Antenna current probe	D 19.99
207 160-10m SWR analyzer	79.99
208 2m SWR analyzer	79.99
209 1.8-170 MHz SWR analyzer	129.99
212 MatchMaker tune up device	79.99
218 SWR analyzer, 440 MHz/NVSO-239 adapt ..	89.99
224 2m FM signal analyzer	149.99
249B 1.8-170 MHz SWR analy/LCD counter ..	219.99
259B 1.8-170 MHz SWR analy/RF res meter ..	239.99
269 1.8-170+440 MHz SWR analy/RF res mtr ..	319.99
29C Carrying case w/window; 209/249B/259B ..	24.99
39C Carrying case w/window; 269	24.99
66 1.8-30/30-170 dip coils; 209/249B/259B ..	19.99
92AA10 10-pack 1300ma AA NiMH cells	24.99
98 Package of 39C/66/1312D for 269	54.99
98B Pack of 92AA10/39C/66/1312D for 269 ..	77.99
99 Pack of 29C/66/1312D; 209/249B/259B ..	54.99
99B Pack; 92AA10/29C/66/1312D; 209/249B/259B ..	77.99
99C Pack - 92AA10/1312D; 209/249B/259B/269 ..	34.99
731 RFI filter for SWR analyzer	89.99
1312D 12vdc 500ma ps for SWR analyzers ..	14.99
270 Guardian Angel 400w PEP lightning protect ..	29.99
97 Gas tube plug for 270	9.99
281 ClearTone communications speaker	12.99
2881 Headset/mic; lcom/ADI/Sta/RS/older Yae ..	24.99

MFJ - continued

AES Price

288K Headset/mic for Kenwood	24.99
288Y Headset/mic; lco Q7/Yae FT10/50/VX1 ..	24.99
2921 Earph/mic; lco/older Yae/compatibles ..	17.99
292Y Earphone/mic; lco Q7/Yae FT10/50/VX1 ..	17.99
2931 Rubber flex earloop earbud/mic; lcom ..	24.99
293K Rubber flex earloop earbud/mic; Kenwood ..	24.99
293Y Rubber flex earloop earbud/mic; Yaesu ..	24.99
2951 Mini spkr/mic; lcom & compatible HT	15.99
295K Mini spkr/mic; Kenwood & compatible HT ..	15.99
295Y Mini spkr/mic; lco Q7/Yae FT10/50/VX1 ..	15.99
297 Desk mic with flexible boom	69.99
5082 Open end - 8-pin mic cable for 297	9.99
5268 Open end - mod phone plug cbl; 297	9.99
5397I Cable/8-pin for 297; lcom HF	15.99
5397K Cable/8-pin for 297; Kenwood HF	15.99
5397Y Cable/8-pin for 297; Yaesu HF	15.99
5397MX Cable/modular for 297; Kenwood	15.99
5397MY Cable/modular for 297; Yaesu	15.99
310 BNC HT antenna window mount clip	14.99
341M 17' antenna cable; NMO	19.99
341S 17' antenna cable; SO-239	19.99
382 Deluxe amplified communications spkr	39.99
384 Dix amp spkr w/speech control knob	29.99
1306 6v 300ma adapter for 384 only	14.99
388 Cyber Ear 12db ear amplifier	29.99
392B Deluxe communication headphones	19.99
394 Boom mic/single headphone	D 29.99
5396I Adapter; 394/396 with lco Xcvt	D 2.99
5396K Adapter; 394/396 with Ken Xcvt	D 2.99
5396Y Adapter; 394/396 with Yae Xcvt	D 2.99
414 Professional Morse Tutor w/LCD	189.99
417 Code Tutor with QSO	59.99
418 Code Tutor with LCD display	79.99
434 Deluxe Voice Memory Keyer	169.99
73 Remote control head w/cable for 434	29.99
461 Pocket size Morse code reader	79.99
5161 DB-9 PC serial port cable	14.99
5162 Cable for radio external speaker	5.99
462B RTTY/ASCII/CW/AMTOR Rcvr multi-reader ..	169.99
5162 Cable for radio external speaker	5.99
464 CW reader w/built-in keyer	169.99
550 Hand key	7.99
554 Deluxe CW practice oscillator	79.99
557 Code oscillator w/key	29.99
616 Speech intelligibility enhancer	159.99
1316 12vdc 1.5A adapter	19.99
381 ClearTone speaker (requires 2)	12.99
392B Deluxe communication headphones	19.99
631 Trickle wall charger; NiMH/nicad AA	9.99
632 Rapid charger; NiMH/nicad AA/AAA	D 19.99
633 Rapid charger; NiMH/nicad AA/AAA/9V ..	24.99
641-Y3 Battery charger; Yaesu FNB-31/33	4.99
10-BCY-3 Charger cup; Yae FNB-31/33	49
662 Simplex pocket repeater	79.99
701 Toroid RFI filters	pack of 4 14.99
704 1kw low-pass filter	49.99
711 High pass filter	D 19.99
762 81db 170MHz BNC attenuator	69.99
801 Super compact field strength meter	19.99
802 Bipolar field strength meter	39.99
802R Field strength remote meter	D 19.99
802X Field strength/remote meter combo	59.99
805 RFI current detector meter	79.99
850 AC line voltage monitor	19.99
852 Power line noise current meter	89.99
854 HF RF current meter	89.99
886 1MHz - 3GHz pocket frequency counter ..	109.99
888 Deluxe 10Hz - 3GHz frequency counter ..	174.99
890 DX beacon monitor	99.99
912 W9INN remote balun	49.99
916 2m/440 duplexer	29.99

MFJ - continued

AES Price

931 Artificial ground unit	89.99
1025 Noise canceling antenna	149.99
1026 Deluxe noise canceling unit w/antenna	169.99
1046 1.6-33MHz receiver passive preselector ..	89.99
1048 1.6-33MHz Xcvt passive preselector	109.99
1112 Multiple DC outlet	34.99
1116 Dix multiple DC outlet	49.99
1117 High current multiple DC outlet	54.99
1118 Dix high current multiple DC outlet	74.99
1213 Interface for JVFAX/HamComm	D 39.99
1262 Microphone switch; 8-pin round	79.99
1268 IBM PC memory keyer	D 69
1273B Basic soundcard interface/soft; 8P-R ..	59.99
1273BM Basic soundcard interface/soft; 8P-M ..	59.99
1275 Soundcard/rig interface/software; 8P-R ..	99.99
1275M Soundcard/rig interface/software; 8P-M ..	99.99
1279 Super soundcard interface/soft; 8P-R ..	129.99
1279M Super soundcard interface/soft; 8P-M ..	129.99
1292 Video digitizer for IBM	D 2.99
1290C 6-pos combo ant/mtr switch/protect	89.99
1701 6-position coax switch	59.99
1702C 2-pos coax switch/lightning protect	24.99
1702CN 2-pos 1.1GHz N switch/lightning protect ..	34.99
1703 2-rig/2-antenna RF safety switch	19.99
1704 4-pos 500 MHz switch/lightning protect ..	64.99
1704N 4-position type N switch	74.99
1925 Controller; Yaesu ATAS-100/other rigs ..	59.99
1925I2 Controller; Yaesu ATAS-100/IC-706 ..	59.99
4035MV Dix 30A adjustable ps, 35A surge	139.99
4103 Switching power supply for Yaesu FT-817 ..	39.99
4125MV MightyLite 22A 3.5 lb switch ps, 25A surge ..	99.99
4225MV MightyLite 22A switching ps, 25A surge ..	139.99
4245MV MightyLite 40A switching ps, 45A surge ..	189.99

MG Electronics (MGE)

HFS-1 10w mobile spkr, 3.5mm plug

D \$ 9.99

MAGELLAN (MAG)

00-19060-000 Pwr/data cbl; Tracker/ColorTrak ..	D \$ 2.99
730275 Ext pwr cbl w/cig adapt; MAP330	12.99
730277 PC cable/cig adapter; MAP330	24.99
Meridian Gold GPS with 16MB base map	249.99
Meridian Platinum GPS/16MB compass/batronic ..	349.99
Meridian Color Handheld color GPS/16MB	399.99
980611 MapSend Topo CD-ROM	99.99
980613-01 MapSend Streets & Destinations CD ..	99.99
980654-01 MapSend DirectRoute; Gold/Plat/Col ..	149.99
SporTrak GPS receiver w/1MB memory	169.99
SporTrak Map GPS w/2MB map+4MB mem	199.99
SporTrak Pro* GPS w/9MB map+23MB mem	269.99

*\$30 rebate from Magellan thru 6/30/04!

SporTrak Color Handheld color GPS/9MB

980611 MapSend Topo CD-ROM	99.99
980613-01 MapSend Streets & Destinations CD ..	99.99
980654-01 MapSend DirectRoute; Pro/Color ..	149.99
MAHA (MAH)	
9V 8.4v 170mah 9v size NiMH batt cell	ea \$ 8.99
AAA-1 1.2v 650mah AAA size NiMH batt cell ..	ea 2.99
AA-FB 1.2v 1400mah AA NiMH batt w/tabs	ea 2.99
4-AA-180 4-pack 1.2v 1800mah AA NiMH cells ..	12.99
4-AA-220-BH 4-pack 1.2v 2200mah AA NiMH cells ..	18.99
MH-C124S Reg cgr; 1-4 AA/AAA NiMH/NiCD ..	9.99
MH-C204F Quik cgr/ond; 2/4 AA/AAA NiMH/NiCD ..	24.99
MHS-DC-124 Cig adapter; MH-C124S/C204F ..	4.99
MH-C204F8AA22 Charger/8 AA2200/car adapt ..	49.99
MH-C401FS4AA22 Charger/4 AA2200/car adapt ..	49.95
MH-BP-7 13.2v 1000mah lcom nickel hydride ..	69.99
MH-BP-8 8.4v 1200mah lcom nickel hydride ..	59.99
MH-BP-8H 8.4v 1800mah lcom nickel hydride ..	69.99
MH-BP-83 7.2v 1300mah lcom nickel hydride ..	49.99
MH-BP-132B 12v 1300mah lco blk nickel hyd/mic ..	29.99

Maha - continued

MH-BP-132G	12v 1300mah Ico gray nick hyd/mic	29.99
MH-BP-173	9.6v 650mah Icom nickel hydride	69.99
MH-BP-180	7.2v 1000mah Icom nickel hydride	49.99
MH-BP-196M	9.6v 1350mah Icom nick hyd	39.99
MH-BP-199	6v 700mah Icom tick hyd/clip	44.99
MH-BP-200	9.6v 680mah Icom nick hydride/clip	59.99
MH-CNB-152	12v 1000mah Sta nickel hydride	59.99
MH-CNB-153	7.2v 1300mah Sta nickel hydride	49.99
MH-FNB-12	12v 1000mah Yaesu nickel hydride	59.99
MH-FNB-17	7.2v 1000mah Yaesu nickel hydride	49.99
MH-FNB-27	12v 900mah Yaesu nickel hydride	59.99
MH-FNB-38	9.6v 650mah Yaesu nickel hydride	59.99
MH-FNB-40H	9.6v 650mah Yae nick hyd/spg clip	39.99
MH-FNB-41	7.2v 1000mah Yae nick hyd/spg clip	55.99
MH-FNB-V47	7.2v 1800mah Yae nick hyd/spg clip	69.99
MH-FNB-V57	7.2v 1500mah Yae nickel hydride	49.99
MH-FNB-58LI	1200mah li-polymer; Yae VXS8	59.99
MH-FNB-72	9.6v 1700mah Yae nickel hydride	59.99
MH-PB-8	12v 1300mah Kenwood nickel hydride	62.99
MH-PB-17	12v 1300mah Kenwood nickel hydride	69.99
MH-PB-18	7.2v 1300mah Ken nick hyd; wall cgr only	49.99
MH-PB-32	6v 1000mah Kenwood nickel hydride	47.99
MH-PB-34	9.6v 1000mah Kenwood nickel hydride	57.99
MH-PB-39	9.6v 1050 mah Ken nickel hyd/clip	59.99
MH-PB-39H	6v 1800mah Ken nickel hyd/clip	59.99
MH-PB-42LI	1800mah li-polymer; Ken THF6A	69.99

MH-C777	Univ cgr/conditioner/cig cord; nicad/nimh	49.99
MHS-CW4	Clip-leads for external charging	3.99
MH-C777 Plus II	Univ cgr/analy; lith/nicad/nimh	89.99
MH-C888	Univ drop-in rapid cgr/cond; nicad/nimh	59.99
MHS-C800U	External charger pin shell	2.99
MHS-C801	Cup; T2/W32/TH22/79/FT10/50	7.99
MHS-C802	Cup; IC02AT/TH87/F470/530	7.99
MHS-C803	Cup; Kenwood TH-D7A/G71A	7.99
MHS-C804	Cup; Icom IC-TH8A/T81A	7.99
MHS-C805	Cup; Yaesu FT-11/41/51R	7.99
MHS-C806	Cup; Ali 195/580/F1/G5/V5/etc	7.99
MHS-DC-777	Cig lighter cord	5.99
MH-101-1	Cgr/ko151/1601/41/131/2Mah 132B/G D	2.99
MH-101-1Y	Cgr/Yae 101/112/127/25/21Mah 1227 D	2.99
MH-101-Y2	Cgr/Yae FNB31/38/Mah MHNFB38 D	2.99
MH-800K	500mw spkr/mic w/clip; Kenwood	19.99
MH-800S	500mw spkr/mic/clip; Ali/Ico/Sta/Yae	19.99
MH-800Y	500mw spkr/mic; Yae FT50/VX1R	24.99
MHS-11	Ico 2G/02/2/32 adapt; A301/302	4.99
MHS-12	Ico 2SAT/W2 adapter; A301/302	4.99
MHS-13	Ico 2GXAT/W21AT adapt; A301/302 D	6.99
MHS-14	Ico W32/31/77/22 adapt; A301/302 D	1.99
MHS-15	Ico TH8A/T81A adapter; A301/302	2.99
MHS-K1	Ken 25/26/75/77 adapt; A301/302	4.99
MHS-K2	Ken TH22/79 adapter; A301/302	4.99
MHS-K3	Ken G71A/D7A adapt; A301/302	1.99
MHS-S1	AD/Standard adapt; A301/302	4.99
MHS-Y1	Yae 23/411E/470 adapt; A301/302 D	4.99
MHS-Y2	Yae 26/415/530 adapt; A301/302 D	4.99
MHS-Y3	Yae FT11/41/51 adapt; A301/302 D	6.99
MHS-Y4	Yae FT10/40/50 adapt; A301/302 D	6.99

MALDOL (MAL)

AH-14	20m telescoping ant w/BNC; FT-817	\$ 45.99
AH-28	10m telescoping ant w/BNC; FT-817	45.99
AH-C7	40m loading coil only w/BNC; FT-817	33.99
AH-C14	20m loading coil only w/BNC; FT-817	33.99
AH-C21	15m loading coil only w/BNC; FT-817	33.99
AH-C28	10m loading coil only w/BNC; FT-817	33.99
AH-R	Telescoping whip for AH-C7/14/21/28	17.99
AH-510R	6/2m/440 37" BNC tele whip; FT-817/HT	59.99
AH-510R/SMA	6/2m/440 37" SMA tele whip	59.99
AS-20	2m/440 8.5" superflex SMA antenna	26.99
AS-25	2m/440 1" SMA antenna	19.99
AS-30	2m/440 15" 0/2.15db superflex SMA ant	29.99

AES Price

Maldol - continued

AX-50	2m/440 0/5db 21" mobile antenna	49.99
AX-75	2m/440 3.2/5.7db 30" mobile ant	59.99
AX-95	2m/440 3.3/5.8db 38" mobile ant	66.99
EM-B80	Small trunk/hatch/van door lip mt	25.99
EX-1048	2m/440 black 0/2.15db 15" mob	44.99
EX-1048NMO	2m/440 blk 0/2.15db 15" NMO	44.99
EX-107RB	2m/440 black 2.6/4.9db 29" mob	56.99
EX-107RBNMO	2m/440 blk 2.6/4.9db 29" NMO	56.99
EX-510B	6m/220 440 blk 0/2.15/5.5db 37" mob	66.99
EX-510BNMO	6m/220 440 blk 0/2.15/5.5db 37" NMO	66.99
FVS-50	Dlx 2-step 16' 9" cable w/UHF connects	42.99
HMC-6S	20/15/10/6/2m/440 68" mobile ant	159.99
HMC-7C	40m loading coil for HMC-6S	34.99
HVU-8	80/40/20/15/10/6/2m 8.6" vert w/radials	319.99
MH-209	2m/440 3" BNC duck	23.99
MH-209SMA	2m/440 3" SMA duck	23.99
MH-510	6m/220 440 0/0/3.2db 20.75" SMA duck	37.99
MH-511	6m/220 440 4.25" SMA duck	33.99
MH-610	2m/220 440 0/1.8/3.2db 14" SMA duck	49.99
MK-30H	Motorized tnl lip/hatch/van door mt	109.99
MSB-1000C	2m/440 2.15/5.5db 39" mobile D	39.99
PR-212DNMO	2m/440 6/8.5db 85" NMO mob D	69.99
PRM-T	Large trunk/hatch/van door lip mt	33.99
SHG-140B	2m 4.1db 56" mobile antenna	49.99
SHG-140BNMO	2m 4.1db 56" NMO mob ant	49.99
SHG-1500B	2m/440 4.5/7.5db 59" mob D	59.99
SHG-1500BNMO	2m/440 blk 4.5/7.5db 59" NMO D	39.99

MAXON (MAX)

MX-49FX	5 ch 49 MHz ear mic Xcvr	\$ 49.99
MX-49SX	49 MHz boom mic/headset Xcvr	29.99

MEADE (MEA)

0705-04-01	ETX-70AT Astro telescope w/tripod	\$319.99
07027	#884 Deluxe tripod	199.99
07137	1.25" 5mm Plossl lens	59.99
07139	1.25" 18mm WA lens	49.99
07170-02	1.25" 6.4mm super Plossl lens	89.99
07173-02	1.25" 15mm super Plossl lens	89.99
07220	#933 4.5" 1.25" erecting prism	69.99
07273	#126 1.25" 2x short-focus Barlow lens	59.99
07279	#670 dew shield	19.99
3514-03-20	ETX-90AT Astro tele/ctrlr/tripod	599.99
0515-03-20	ETX-125AT Astro tele/ctrlr/tripod	999.99
07137	1.25" 5mm Plossl lens	59.99
07139	1.25" 18mm WA lens	49.99
07170-02	1.25" 6.4mm super Plossl lens	89.99
07173-02	1.25" 15mm super Plossl lens	89.99
07273	#126 1.25" 2x short-focus Barlow lens	59.99
07217	#928 4.5" 1.25" erecting prism; DS60/90	39.99
07436	#497 Autostar controller; ETX-125EC	49.99
494	#494 Autostar controller; DS-EC-series	19.99
20117	DS-2114ATS 114mm reflector telescope	399.99
20201	NGC-60 60mm refractor telescope	199.99
07137	1.25" 5mm Plossl lens	59.99
07139	1.25" 18mm WA lens	49.99
07170-02	1.25" 6.4mm super Plossl lens	89.99
07173-02	1.25" 15mm super Plossl lens	89.99
07273	#126 1.25" 2x short-focus Barlow lens	59.99
07522	908B broadband nebula filter	49.99

MIDLAND (MID)

74-200	SAME weather/hazard alert radio/ps	\$ 49.99
74-210	FM/SAME weather/hazard alert radio/ps	49.99
WR-300	AM/FM/SAME WX/hazard alert radio/ps	49.99

Miracle Antenna (MIA)

Miracle Whip	3.5-450MHz 57" QRP ant/tuner	\$139.99
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MIRAGE (MIR)

A-10156	50-52 FM/SSB 10/150w amp/preamp	\$349.99
B-34	2m FM 2/35w amplifier; no mob bkt	79.99
B-34G	2m FM/SSB 3.5/35w amp/preamp	99.99

AES Price

Mirage - continued

B-310G	2m FM/SSB 4/100w amp/preamp	179.99
B-320G	2m FM/SSB 50/200w amp/preamp	429.99
B-1018G	2m FM/SSB 10/160w amp/preamp	369.99
B-2518G	2m FM/SSB 25/160w amp/preamp	299.99
B-2530G	2m FM/SSB 25/300w amp/preamp	689.99
B-5018G	2m FM/SSB 50/160w amp/preamp	299.99
B-5030G	2m FM/SSB 50/300w amp/preamp	669.99
BD-35	2m/440 4/45/4/35w HT amp	149.99
BD-38/BD-38G	2m/440 4/80w HT amp/preamp	299.99
B-246	5/50w 2m HT dock boost amp/pre	109.99
MI-1	Ico 2G/02/2/23 adapter; B24G/BD25	7.99
MI-2	Ico 2SAT/W2 adapter; B24G/BD25	9.99
MI-3	Ico 2GXAT/W21AT adapt; B24G/BD25	9.99
MK-1	Ken 25/26/75/77 adapt; B24G/BD25	9.99
MK-2	Ken 22/79 adapter; B24G/BD25	9.99
MY-1	Yae 23/411E/470 adapt; B24G/BD25	9.99
MY-2	Yae 26/415/530 adapt; B24G/BD25	9.99
MY-3	Yae FT11/41/51 adapt; B24G/BD25	9.99
C-226	220 FM/SSB 2/20w amp/preamp	154.99
C-211G	220 FM/SSB 2/110w amp/preamp	329.99
C-1012G	220 FM/SSB 10/120w amp/preamp	329.99
C-1022G	220 FM/SSB 10/220w amp/preamp	689.99
C-2512G	220 FM/SSB 25/120w amp/preamp	309.99
C-5022G	220 FM/SSB 50/200w amp/preamp	369.99
D-15N	430 FM/SSB/ATV 2/15w type N amp	169.99
D-26N	440 FM/SSB 2/60w type N amplifier	259.99
D-1010N	440 FM/SSB 10/100w type N amp	379.99
D-3010N	440 FM/SSB 30/100w type N amp	349.99
D-1010-ATVN	430 ATV 10/100w type N amp	399.99
RC-1	Remote control head w/18" cable	45.99
*Not for B-23/C-22/D-26		
RC-2	Rem ctt head/cable; B-XX18G	45.99

The following Repeater Amplifiers are Special Order. Specify SO-239 or type N connectors

A-1015NR	6m FM 2/80w type N amplifier	\$549.99
A-1015R	6m FM 2/80w SO-239 amplifier	529.99
C-211NR	220 FM 5/80w type N amplifier	619.99
C-211R	220 FM 5/80w SO-239 amplifier	599.99
C-1012NR	220 FM 5/90w type N amplifier	619.99
C-1012R	220 FM 5/90w SO-239 amplifier	599.99
C-2512NR	220 FM 15/90w type N amplifier	589.99
C-2512R	220 FM 15/90w SO-239 amplifier	569.99
D-1010NR	440 FM 4/80w type N amplifier	629.99
D-3010NR	440 FM 12/80w type N amplifier	599.99
D-1010-ATVN-R	430 ATV 4/80w type N amp	629.99

PREAMS

KP-1/10M	10m in shack preamp	\$ 99.99
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KP-1/6M	6m in shack preamp	129.99
KP-1/2M	2m in shack preamp	129.99
KP-1/220	220 in shack preamp	99.99
KP-1/440	440 in shack preamp	129.99
KP-2/10M	10m mast mount preamp	119.99
KP-2/6M	6m mast mount preamp	179.99
KP-2/2M	2m mast mount preamp	179.99
KP-2/220	220 mast mount preamp	129.99
KP-2/440	440 mast mount preamp	179.99

WATTMETER

MP-3	420-450 5/50/150w PEP wattmeter	\$199.99
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MOTOROLA (MOT)

50226	Headset w/mic for older FRS	\$ 7.99
25834	Rosewood T5200 Alkaline FRS	29.99
54500-2	22ch 500mw GMRS/FRS handheld	29.99
T-5950-2/AA	22 ch 1w GMRS/FRS HH	79.99

NCG (NCG)

Power Pocket	12v 2AH lead acid belt batt/cgr	\$ 66.99
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NCS (NCS)

NCS-3230	Multi-receiver receive console	\$349.99
NCS-1514	Wall power supply; NCS-3230	24.99

NCS - continued

NCS-P2PH35-A Multi-r/spkr out set 6 cables	42.99
NCS-MRX2MS-A 3240 & 3230 interface cbl kit	49.99
NCS-3240 Multi-switcher audio device	299.99
NCS-1512 Wall power supply; NCS-3240 ..	12.99
NCS-LoZNC Unterminated interface cable ..	17.99
NCS-LoZ8PI-I Icom 8-pin interface cable ..	24.99
NCS-LoZ8PI-I Icom modular interface cable ..	23.99
NCS-LoZ8PI-K Kenwood 8-pin interface cable ..	24.99
NCS-LoZ8PI-K Kenwood modular interface cbl ..	23.99
NCS-LoZ8PI-Y Yaesu 8-pin interface cable ..	24.99
NCS-LoZ8PI-Y Yaesu modular interface cbl ..	23.99
NCS-3400 Multi-patch audio patch panel	129.99

Night Owl Optics (NOO)

NOCC-3 3.1x42 night vision scope/illuminator .D	\$139.99
NOLA-42 Camera adapter	39.99
NOCD-20 Lens doubler	29.99
NONW24-BPH2 2.4x night vision/illuminator	159.99
NODS-5 5x48 night vision scope w/illuminator	249.99
NOCA-42 Camera adapter	39.99
NOXG-2 3x62 night vision scope w/illuminator	999.99
NCCA-42 Camera adapter	39.99

NORCOMM (NOR)

NC-101 Tunable CTCSS encoder	\$ 21.99
NC-104 Programmable CTCSS encoder	26.99
NC-106 Prog CTCSS encoder/decoder	62.99
NC-401 Sub-miniature DTMF decoder	62.99

Oregon Scientific (ORE)

EMR-812A Wireless thermometer	\$ 29.99
THR-138 Extra wireless sensor; EMR-812A	24.99
PE-319 Pedometer with personal security	19.99
RGR-122 Wireless rain gauge w/LCD console	59.99
RM-116E Exactset radio controlled clock ....D	29.99
WMR-112A Wireless weather station	199.99
WM-918 Dlx weather station w/rain gauge	229.99
WMR-968 Dlx wireless WX stn w/rain gauge ..	399.99
WR-102 Port WX/hazard radio/SAME alert	49.99
WR-196T AM/FM/SAME WX alert clock radio ..	69.99

OUTBACKER (OUT)

OB-8 75-10m 300w PEP 6' 8-band mobile ant	\$319.99
OB-8HP 75-10m 500w PEP 6' 8-band mob ant	329.99
OB-S8 75-10m 300w PEP split ant/storage bag	329.99
OB-8TRI 75-10m 300w PEP 3pc 6' port ant/bag	339.99
Joey 80-2m 20w antenna w/counterpoise	299.99
(ALP) MicroMount Tripod system for Joey ...	49.99
OB-M 75/40/20/17/10m/HF marine 300w PEP 6'	449.99
Perth 75-10m 150w PEP 7.5' mobile ant	329.99
Perth Plus 75-10m+6m/2m 150w PEP 6' mob ant	329.99
Stealth Plus 75-10m+6m/2m 100w PEP 4' ant	319.99
Outreach 160-10m 300w PEP 12' antenna	419.99
Outreach 500 80-6m 600w PEP 12' antenna	449.99
(ALP) Outreach Base tripod mtg sys for mob ant	199.99
OB-SB ¾-24 spring and ¾" hole base	109.99
Diamond K-400-3/8C ¾-24 trunk mt, 6' coax	69.99
Diamond C-110 10' ext cable; K-400-3/8C	14.99

PACCOMM (PAC)

Spirit-2 Std high performance controllerD	\$169.99
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Palomar Engineers (PAL)

MSB-3 Magnetic switch receive balunD	\$ 6.99
PT-340 Tuner-Tuner (use with ant tuner)	99.99
RFI-4 RF interference kit	25.99
VLF-A VLF converter; 10-500 KHz to 80m	99.99
VLF-S VLF conv; 10-500 KHz to 4-4.5 MHz	99.99

PALSTAR (PLS)

AT-1KM 600w T-match differential tuner/crossneedle mtr	\$359.99
AT-4K 2.5kw T-match edgewound roller ind tuner	895.99
AT-1500A 1kw auto stepper motorized tuner	995.99

Palstar - continued

AT-1500BAL 750w dual edgewound roller ind tuner	695.99
AT-1500CV 750w T-match ceramic roller ind tuner	459.99

PAR (PAR)

OA-28 10m horizontal omni antenna	\$ 74.99
OA-50 6m horizontal omni antenna	69.99
SK-50 Stacking harness for OA-50	36.99
OA-144 2m horizontal omni antenna	54.99
SK-144 Stacking harness for OA-144	34.99
OA-222 220 horizontal omni antenna	54.99
SK-222 Stacking harness for OA-222 ....D	14.99
OA-432 430 horizontal omni antenna	54.99
SK-432 Type N stacking harness; OA-432 ..	54.99
SM-50 6m 2el stressed moxon 5.8db beam	79.99
UHF0N450 440 dual band notch filter	69.99
VHF0N152 2m dual band notch filter	69.99
VHF0N152HT 2m dual band HT notch filter ..	68.99
VHFTN152-158 2m dual band+pager notch flit	82.99
UHF-12 12" RG58/silver/gold/tef PL259s ..	9.99

PENETROX (PEN)

Penetrox A 4 oz tube for antennas	\$ 12.99
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POLICE CALL (POL)

Vol 3/4 2004 IL/NKY/MO/OH/WV book/48 state CD	\$ 19.99
Vol 5/8 2004 AZ/CO/IA/IN/etc book/48 state CD	19.99

POLYPHASER (PLY)

LIGHTNING PROTECTION

IS-50NX-C2 125-1000 375/125/50w N flange	\$ 61.99
IS-50UX-C0 1.5-400 2kw/375/125w flange mt	61.99
IS-50UX-C1 50-700MHz 375/125w flange mt	61.99
IS-B50LN-C2 125-1000 375/125/50w N bulkhead	64.99
IS-B50LU-C0 1.5-400 2kw/375/125w bulkhead	64.99
IS-B50LU-C1 50-700 375/125w bulkhead mt	64.99
IS-IE50LU-C0 1.5-400 dtx 2kw/375/125w bulkhd	89.99
IS-IE50LU-C1 50-500 dtx 375/125w bulkhead	39.99
IS-IE50LN-C1 50-700 dtx 375/125w N bulkhd	89.99
BF Adapter Bulkhead to flange mt adapter	6.99
FB Adapter Flange to bulkhead mt adapter	8.99
IS-PLD0-120-15A 120v 15A power protector D	139.99
IS-PLD0-120-20A 120v 20A power protector D	179.99
PLD0-120US15A 120v 15A power protector D	159.99
PLD0-120US20A 120v 20A power protector ..	199.99
IS-RCT 8-wire rotor control protector	54.99
J-1 1/2" to 1 1/8" bronze transition clamp	8.99
J-2 1 1/2" to 2 1/4" bronze transition clamp ..	12.99
IS-SPTL Single phone line protector	57.99
CS112-25 25' 1 1/8" copper strap	25.99
CS112-50 50' 1 1/8" copper strap	49.99
CS112-75 75' 1 1/8" copper strap	59.99
CS112-100 100' 1 1/8" copper strap	99.99
CS3-25 25' 3" copper strap	49.99
CS3-50 50' 3" copper strap	99.99
CS3-75 75' 3" copper strap	109.99
CS3-100 100' 3" copper strap	149.99
CU-SP6P Copper single point ground panel	69.99
TK-2 1 1/2" strap to Rohm trn corrosion free clamp	5.99
TK-3 1 1/2" strap-2 1/4" to 3 1/4" mast corr free clamp	8.99
1C-112S #6-#1 wire to 1 1/2" strap clamp bond	10.99
58R-112S 1 1/2" strap to 3/8" gnd rod clamp bond	12.99
MSC-3 Junc; 2+ 1 1/2" or 3" strap clamp bond	10.99
UNI-KIT 2CT Gnd kit; coax to alum/tin/galv ..	29.99
UNI-KIT 2TC Gnd kit; galv trn leg to copper ..	32.99
UNI-KIT 2CC Ground kit; coax to copper	28.99
CCK Copper cleaning kit; 4 oz can, brush	27.99
GLEP Lightning and EMP Protection book ...D	20.00
LPES Lightning Protection/Grounding book ...	20.00

PREMIER (PRE)

AL-800 2m/440 34" BNC rubber duck ant	\$ 29.99
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Premier - continued

RD-2 2m/440 2" BNC duck	14.99
RD-2SMA 2m/440 2" SMA duck	15.99
RD-8 2m/440/900 6.5" BNC duck	14.99
RD-9 2m/440/900 7" BNC duck	18.99
RD-9SMA 2m/440/900 7" SMA duck	20.99
RD-78 2m/440/900 15" BNC whip	19.99
RD-98 2m/440 17" BNC whip	24.99
RD-98SMA 2m/440 17" SMA whip	27.99
SPM-100 Spkr/mic; ADI/Alinco/Icom/Yaesu ...	27.99
SPM-101 Spkr/mic for Kenwood	27.99
SPM-102 Spkr/mic; Yaesu FT-50R/VX-1R/5R	27.99
SPM-301 Spkr/mic/PTT lock/volume; Kenwood	4.99
SPM-400A Boom/mic; ADI/Alinco/Icom/Yaesu	37.99
SPM-400A Boom mic; Yae FT-50R/VX-1R/5R	37.99
PCA-VYHF Cable/modular; Yaesu VHF	9.99

PRO AM by VALOR (VAL)

VHF/UHF ANTENNAS ONLY (No Mounts)

MO144-440 2m/440 antenna only	\$ 21.99
PAQA 136-515 MHz ¼ wave antenna only	9.99
PHB-144 2m ¼ wave 3 db antenna only	29.99

MOUNTS ONLY FOR ABOVE ANTENNAS

PAM Low profile magnet mount w/coax	\$ 24.99
PAMB Black low profile mag mount w/coax ..	24.99
PAN38 ¾-24 antenna to NMO mt adapter	14.99
PAS ¾" surface mount w/coax	19.99
PASMO ¾" surface mt only (no coax)	7.99
PAS38 ¾" surface mount w/coax	6.99
PAT-2 No hole trunk mount w/coax	19.99
PAT-2B Black no hole trunk mount w/coax	19.99

OTHER VHF/UHF ANTENNAS & MOUNTS

100ADN SO-239 horizontal mirror mt	\$ 10.99
101ADN HD alum mirror mt w/SO-239	10.99
105AD Hvy duty ¾" mount assembly	6.99
105HD Heavy duty mount assembly	3.99
301 4" low profile ¾-24 magnet mt w/coax	16.99
401 5" low profile ¾-24 magnet mt w/coax ..	19.99
BNC-SC-RS Suction cup extension; ducks	14.99
DAK Mt for 2 vert ants or horizontal dipole	13.99
GM-144 2m 2.5db on glass antenna	29.99
GM-270 2m/440 2.6/3db on glass antenna	59.99
TGMDK On glass replacement mtg kit	8.99
MM-3401 Maxi-mag mt ¾-24 kit (3-5" mags)	59.99
SS-100MOT 3-way NMO mirror mt w/coax	23.99
CX-144 2m ¾ wave 3db ¾-24 whip	17.99
MM-270B 2m/440 mini mag mt ant w/BNC	19.99
PM-144-440BN 2m/440 BNC mag mt ant	29.99
TGS 30-1200MHz on-glass scanner ant	34.99
VAA-002B 144-450 black ¾" wv mag mt ant	23.99
VAA-002BBN 144-450 black ¾" wv BNC mag ant	29.99
120 Sawtooth hump mt for mobile radios	7.99
D-270 2m/440 100w duplexer	39.99

MOBILE HF ANTENNAS (No Mounts)

AB-5 75/40/20/15/10m antenna	\$119.99
PHF-160 160m 8' ¾-24 whip	89.99
PHF-75 75m 8' ¾-24 whip (4' coil, 4' whip)	29.99
PHF-40 40m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-30 30m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-20 20m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-17 17m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-15 15m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-12 12m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-10 10m 8' ¾-24 whip (4' coil, 4' whip)	23.99
PHF-6 6m 58" ¾-24 whip	23.99
103S Quick disconnect/5 twist lock connectors	24.99

QRZ (WAL)

Ham QRZ US & international calls plus programs	\$ 24.99
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QSL Card Holders (ART)

QSL Card Holders, pack of 3, 20 cards/holder	\$ 18.99
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AES Price

QUEST (QUS)

1004	Astra 1 hobby rocket kit	\$ 7.49
1014	Big Betty hobby rocket kit	9.99
1604	QE-2 payloader quick-kit	11.99
2001	Evader escape missile kit	7.99
5721	Cyclone RTF rocket kit	9.99
5740	A6-4 motor flight pack (3)	6.29
5741	B6-4 motor flight pack (3)	6.79
5743	C6-3 motor flight pack (3)	7.49
5744	C6-5 motor flight pack (3)	7.49
7010	TigerTail II igniters (6)	2.99
7021	Recovery wadding (100 sheets)	2.99
7700	Complete launch system	18.99

RCA (RCA)

108	F-56 connector w/o-ring for TV coax	\$ 4.99
AH-19	2' audio cable w/RCA plugs	2.99
AH-211	25' audio cable w/RCA plugs	6.99
ANT-1020	VHF TV/UHF TV/FM indoor antenna	19.99
RP-3710	AM/FM clock radio	24.99
TA-25	5dbb VHF/UHF TV/FM distribution amp	19.99
VH-84	6' audio/video cable w/gold RCA plugs	5.99

RF INQUIRY (RFI)

CF250E-UHF	250w 1.8-70 common mode filter	\$ 89.99
CF5KV-UHF	5kw 1.8-70 common mode filter	124.99

RF PARTS (See Diamond)

RAMSEY (RAM)

AA-7	Active antenna kit	\$ 34.99
AR-1	Aircraft receiver kit	34.99
CW-7	CMOS keyer kit	19.99
DF-1	Foxhound direction finder kit	69.99
FR-1	FM broadcast receiver kit	29.99
HR-20	20m receiver kit	34.99
HR-40	40m receiver kit	34.99
QRP-20	20m CW transmitter kit	34.99
QRP-40	40m CW transmitter kit	34.99
RFS-1	RF sensed switch kit	19.99
SCA-1	SCA decoder kit	34.99
SR-2	Shortwave receiver kit	39.99
TS-1	CW touch paddle switch kit	4.99
UT-5	Universal timer kit	9.99
VS-1	Voice activated switch kit	9.99

RANGER (RAN)

RCI-2950DX	10/12m 25w SSB/10w FM/AM/CW	\$269.99
RCI-2970DX	10/12m 150w SSB/50w FM/AM/CW	399.99
RCI-5054DX	6m 25w SSB/10w FM/AM/CW	269.99

Robinson Racing (RRP)

1422	48P absolute pinion 22T	\$ 4.99
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SGC (SGC)

04-01	SG-2000 150w 1.8-30 MHz Xcvr	1429.99
51-82	Fan kit for continuous duty xmit	269.99
04-10	SG-2000 Xcvr w/SP/PowerTalk head	1649.99
04-23	SG-2000 Xcvr/SP/PowerTalk remotd	1879.99
52-34	RS-232 interface; SG-2000 Xcvr	119.99
52-51	CA-1 High voltage feed wire Δ, per ft.	.29
52-54	CA-2000 Rem head cable Δ, per ft.	.99
53-04	PS-30 30A/40A peak unreg ps	299.99
53-05	PS-50 50A/70A peak unreg ps	369.99
52-61	PSC-12-1 12' ps cable, 1 plug	29.99
52-62	PSC-12-1 12' ps cable, 2 plugs	49.99
05-01	SG-2020 Mini 20w PEP QRP Xcvr/mic	599.99
05-04	SG-2020 Mini 20w PEP QRP Xcvr/mic/ADSP2	789.99
54-22	SG-239 200w Smartuner	179.99
52-96	SG-500 1.8-24MHz 12v 500w PEP amp	1249.99
51-82	Fan kit for continuous duty xmit	269.99
54-14	SG-230 200w 1.8-30 MHz 12v Smartuner	489.99
54-61	25' extension cable	60.99

SGC - continued

54-62	50' extension cable	90.99
54-63	SmartLock; tuners made after 9/1/93	59.99
54-15	SG-235 500w 1.8-30MHz 12v Smartuner	1169.99
54-17	SG-231 HF+6m 12v Smartuner	529.99
54-18	SG-237 100w PEP HF+6m mini Smartuner	359.99
54-19	SG-237 PCB only 100w PEP Smartuner	249.99
54-22	SG-239 200w Smartuner	179.99
54-23	Stealth Kit SG-237 w/loop antenna	399.99
54-25	MAC-200 Smartuner/ant switch combo	359.99
54-26	SG-211 60w mini Smartuner	179.99
55-04	SG-103 2-28 MHz 90' 150w dipole Δ	199.99
55-27	SG-303 1.8-30 9' mobile whip & mt Δ	399.99
55-67	Replacement whip for SG-303	249.99
55-28	SG-307 1.8-60 7' mobile whip & mt	449.99
55-47	QMS-2 Quick mt sys w/SG-230/303 whip	894.99
55-48	QMS-3 Quick mt 500w sys/SG-235 Δ	1899.99
55-50	QMS-37 Quick mt sys/SG-237, less whip	549.99
70-14	ADSP2 DSP noise reduction speaker	129.99

SAMLEX (SAM)

FCP-1000	1A ps w/cigarette lighter socket	\$ 9.99
SEC-1223	23A switching ps w/fan, 24A surge	99.99
SI-175HP	175w 12vdc-115vac inverter	29.99
SI-400HP	400w 12vdc-115vac inverter	49.99
SPS-1204UL	3.5A switching ps+cig socket	29.99

SANGEAN (SAN)

ATS-404	AM/FM/SW portable receiver w/case	\$ 79.99
ATS-505P	AM/FM/SW portable receiver	129.99
ATS-606A	AM/FM/shortwave portable receiver	139.99
ATS-818	AM/FM/shortwave portable Rcvr	169.99
ATS-818CS	AM/FM/SW port Rcvr w/cassette D	199.99
ATS-909	AM/FM/shortwave portable Rcvr	249.99
DT-200V	AM/FM/VHF TV sound dig port Rcvr	69.99
PT-50	AM/FM/SW portable receiver	79.99
PT-80	Deluxe AM/FM/SW portable receiver	159.99
ANT-60	Portable wind-up SWL antenna	13.99

SCANCAT (SCA)

Lite-Plus	Scanner programming software	\$ 29.99
Gold for Windows	Dlx scanner prog software	99.99

SEQUIA (SEQ)

POCKET PC REF	Pocket PC reference book	\$ 14.99
POCKET REF	Pocket reference book	12.99
WinRef 98-95	Windows pocket reference book	9.99

SHAKESPEARE (SHA)

396-1	3 db, 5' VHF marine ant, less mount	\$ 69.99
5101	6 db, 8' VHF marine ant, less mount	59.99
5202	6db 8' VHF mar ant/chrome ferrule, less mt	89.99
5206-C	Econo 8' VHF mar ant/chrome ferrule, no mt	49.99
495	White plastic lift & lay mount	9.99
4187	Stainless steel ratchet mount	36.99
420	3db, 5' VHF marine ant w/fold-down mt	69.99

Smiley Antenna (SMI)

270A	2m/440 gain telescopic whip	\$ 19.99
270A/SMA	2m/440 gain tele whip w/SMA	19.99
5/8 SLD-2	2m 1/4" Slim Duck rubber ant	17.99
5/8 SLD-220	220 1/4" Slim Duck rubber ant	17.99
5/8 SLD-440	440 1/4" Slim Duck rubber ant	17.99
5/8 SLD-2 Combo	2m 1/4" duck & stubby ant	24.99
5/8 SLD-220 Combo	220 1/4" duck & stubby ant	24.99
5/8 SLD-440 Combo	440 1/4" duck & stubby ant	24.99
FLX 1/2 WAV-2M	1/2 wv 2m BNC whip/flex coil	25.99
RD-2	2m rubber duck antenna	14.99
RD-220	220 rubber duck antenna	14.99
RDMD-2	2m mini rubber duck antenna	14.99
RDMD-220	220 mini rubber duck antenna Δ	6.99
RDMD-440	440 mini rubber duck antenna	14.99
RDS-2	2m stubby rubber duck antenna	14.99
RDS-220	220 stubby rubber duck antenna	14.99

AES Price

Smiley - continued

RDS-440	440 stubby rubber duck antenna	14.99
SD-2	2m Slim Duck thin rubber antenna	14.99
SD-220	220 Slim Duck thin rubber antenna	14.99
SL-440	440 slimline type duck	12.99
SS-II	Super Stick 2m 1/4" wv telescopic ant	19.99
SS-III	Super Stick 220 1/4" wv telescopic ant	19.99
SS-IV	Super Stick 440 1/4" wv telescopic ant	19.99
SS-IV/Combo	2m 1/4" wv telescopic & stubby ant	26.99
SS-III/Combo	220 1/4" wv telescopic & stubby ant	26.99
SS-IV/Combo	440 1/4" wv telescopic & stubby ant	26.99
TAQ-2	2m 1/4" wave stainless whip	10.99
TAQ-220	220 1/4" wave stainless whip	10.99
TAQ-440	440 1/4" wave stainless whip	10.99
TS	Thin Stick 2m/220 1/4" wave telescopic whip	16.99

SOLARCON (SOL)

A-99	10m/CB 17' 8" fiberglass base ant	\$ 64.99
GPK-1	Ground plane radial kit	39.99

SONY SHORTWAVE (SON)

ICF-SW07	AM/FM/SW micro Rcvr w/ps	\$399.99
ICF-SW11	AM/FM/SW compact receiver	49.99
ICF-SW12	AM/FM/SW travel Rcvr/world clock	89.99
ICF-SW35	AM/FM/SW portable receiver	89.99
ICF-SW40	AM/FM/SW port receiver	119.99
ICF-SW77	AM/FM/SW portable receiver	469.99
ICF-SW100S	AM/FM/SW portable receiver	349.99
ICF-SW100T	AM/FM/SW port Rcvr/cassette	399.99
ICF-SW7600GR	AM/FM/SW portable receiver	159.99
AN-1	LW/MW/SW inr/outdoor active rcv ant D	99.99
AN-102	LW/MW/SW indoor active rcv ant	79.99
AN-LP1	Folding active loop ant w/case	89.99
DCC-E260	Mobile DC adapter; ICF-SC1	6.99

STICKY PAD (STI)

13810	7 1/2" x 4 1/2" sticky pad for handhelds, etc	\$ 5.99
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Synthetic Textiles (SYN)

100'	1/2" black double braided rope	\$ 7.99
100'	3/16 1/2" black double braided rope	16.99
100'	5/16 1/2" black double braided rope	22.99
350'	1/2" black double braided rope	44.99

TV GUARDIAN (TVG)

TV Guardian	TV/video foul language filter	Δ \$ 89.99
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Terk Technologies (TER)

Advantage	Indoor passive fine-tunable AM ant	\$ 49.99
AF-9330	Indoor AM/amplified FM tower ant D	19.99
AF-9925	Indoor AM/amplified FM tower ant D	39.99
AM-1000	Indoor passive fine-tunable AM ant D	39.99
FM-50	Amplified indoor/outdoor FM ant kit Δ	39.99
HDTV-1	Indoor UHF/VHF HDTV antenna	29.99
LF-30S	2.4GHz wireless w/aud sys/rem features	99.99
LF-IRX	Remote control extender	39.99
MOD-41	Deluxe RF modulator/switch	39.99
PI-B	Indoor AM/amplified FM loop antenna	49.99
Tower	Indoor AM/amplified FM tower antenna	24.99
TSP-6	AC/TV/telephone surge protector	29.99
TV-42	Clip-on mini dish mt amp TV ant; 2 LNB dish	49.99
TV-55	Indoor/outdoor TV antenna	89.99
TV-MAST	TV antenna mast mount kit	1.99
VR-1	TV volume regulator	49.99
VS4-MOD	Deluxe 4 input RF modulator/swtch	49.99

TESTORS (TES)

800001	1/2 radio control mini coupe/metal	\$ 29.99
800002	1/2 radio control audi tt coupe/metal	29.99

Times Microwave (TMS)

LMR-400	Standard 1/8" coax cable	per ft. \$.64
LMR-400	500 ft. Roll	249.99
LMR-400-DB	Watertight 1/8" coax cable per ft.	.74
LMR-400-DB	500 ft. Roll	299.99

Times - continued

LMR-400-UF UltraFlex 3/4" coax cable ..per ft.	98
LMR-400-UF ..500 ft. Roll	399.99

TIMEWAVE (TIM)

ANC-4 RF noise canceller	\$209.99
AC-1 12vdc 600 ma adapter	15.99
AC-5 12vdc 1.7A desktop ps	24.99
DSP-599zx All-mode DSP noise filter	436.99
AC-5 12vdc 1.7A desktop ps	24.99
PK-96/100K 9600 baud controller/128K RAM (CSS) PK-Term 99 Terminal prog: PK-96/232	219.99
AC-1 12vdc 600 ma adapter	15.99
AC-5 12vdc 1.7A desktop ps	24.99
PK-232/PSK Multimode controller w/sound card (CSS) PK-Term 99 Terminal prog: PK-96/232	531.99
AC-5 12vdc 1.7A desktop ps	79.99
AC-5 12vdc 1.7A desktop ps	24.99
HSC-99 HamHub station controller	349.99

TRAXXAS (TRX)

2410 Bandit RTR electric buggy w/TQ radio ..	\$129.99
3606 Stampede RTR electric monster truck w/ESC	174.99
3706 Rustler RTR electric stadium truck w/ESC	154.99
3710 Rustler RTR electric stadium truck w/TQ Tx	134.99
3906 E-Maxx RTR electric monster truck	334.99

TRINITY (TRN)

RC-2141 Monster horsepower stock pro	\$ 39.99
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TRIPP LITE (TRI)

PV-140 140w 12vdc-115vac inverter	D \$ 24.99
PV-150 150w 12vdc-115vac inverter	24.99
PV-300 300w 12vdc-115vac inverter	39.99
PV-375 375w 12vdc-115vac inverter	39.99
ISOBAR-8 ULTRA 8 outlet surge suppress/LEDs	79.99
SUPER-7 7 outlet surge suppressor	19.99
SUPER-7+TEL 7 outlet/fax modem surge	29.99

TUBES (TUB)

6146W Tube	\$ 26.99
12BY7A Tube	12.99
3-500Z6-RFP High dissipation tube (3-500Z)	159.99
572B Tube	49.99
811A Tube	19.99

US TOWER (UST)**FREE STANDING CRANK-UPS (not for T'X)**

TX-438 38' crank-up tower	T 1299.99
TX-455 55' crank-up tower	T 1799.99
TX-472 72' crank-up tower	T 2939.99
TX-472MDP 72' crank-up w/motor drive	T 4729.99
TX-489MDPL 89' crank-up w/motor drive	T 7659.99

FREE STANDING HD CRANK-UP TOWERS

HDX-538 38' crank-up tower	T 1539.99
HDX-555 55' crank-up tower	T 2679.99
HDX-572MDPL 72' crank-up w/motor drive	T 7019.99
HDX-589MDPL 89' crank-up w/motor drive	T 9189.99
HDX-689MDPL 89' HD crank-up w/motor	T 17739.99
HDX-5106MDPL 106' HD crank-up w/motor	T 19299.99

COMPACT TMM (Top mt rotor for full retraction)

TMM-433SS 33' crank-up tower	T 1379.99
TMM-433HD 33' HD crank-up tower	T 1669.99
TMM-541SS 41' crank-up tower	T 1809.99

ACCESSORIES FOR CRANK-UP TOWERS

CX-2 Coax arms (2) for 2-section tower	\$ 68.99
CX-3 Coax arms (3) for 3-section tower	94.99
CX-4 Coax arms (4) for 4-section tower	134.99
CX-5 Coax arms (5) for 5-section tower	184.99
CX-6 Coax arms (6) for 6-section tower	234.99
HDP Service platform	T 1299.99
IV-16 Inverted vee arm for MA's	51.99
M-5 2" OD 5' mast extension for MA's	51.99
M-10 2" OD 10' mast	94.99

US Tower - continued

M-15 2" OD 15' mast	T 129.99
M-15R 2" OD 15' reinforced mast	T 189.99
M-20 2" OD 20' mast	T 169.99
M-20R 2" OD 20' reinforced mast	T 249.99
CM-20 2" OD 20' cromoly mast	T 499.99
MD-75 Heavy duty 1 HP motor drive	T 1049.99
MDP-750* Pull-down drive; TX-472/HDX-555 T	1629.99
MDPL-1000* Pull-down drive; HDX-572	T 2199.99
*Requires MCL-100 or RMC-1000. MDP-750 and MDPL-1000 not sold separately	
MRF Mast raising fixture	329.99
MCL-100 Limit switch package	519.99
RMC-1000 Remote control w/limit switch	1069.99
RP-3 Rotor plate for 10" section	52.99
RP-4 Rotor plate for 12 1/2" section	63.99
RP-5 Rotor plate for 15" section	70.99
TRX-80 Raising fixture; TX-438/455/HDX-538/555 T	529.99
TRX-80HD Raising fixture; TX-472/489/HDX-572/589 T	699.99
TRX-100HD Raising fixture; HDX-689/5106 T	939.99
TB-2US Thrust bearing; 2" mast w/2 flange holes	119.99

MA-SERIES TUBULAR TOWERS

MA-40 40' crank-up mast	T 1049.99
MA-550 55' crank-up mast	T 1619.99
MA-550MDP 55' crank-up mast w/motor	T 3049.99
MA-770 70' crank-up mast	T 2639.99
MA-770MDP* 70' crank-up mast w/motor	T 4149.99
MA-850* 85' crank-up mast	T 4069.99
MA-850MDP* 85' crank-up mast w/motor	T 5589.99
*Requires MAB or MARB-series base	

MA-SERIES ACCESSORIES

CX-2M Coax arms (2) for MA-40	\$ 72.99
CX-3M Coax arms (3) for MA-550	107.99
CX-4M Coax arms (4) for MA-770	164.99
CX-5M Coax arms (5) for MA-850	199.99
MAB-40 Hinged base for MA-40	T 439.99
MAB-550 Hinged base for MA-550	T 519.99
MAB-770 Hinged base for MA-770	T 639.99
MAB-850 Hinged base for MA-850	T 769.99
MAF-40 Raising fixture for MA-40	269.99
MAF-550 Raising fixture for MA-550	T 369.99
MAF-770 Raising fixture for MA-770	T 379.99
MAF-850 Raising fixture for MA-850	T 459.99
MARB-40 Rotor base accessory for MA-40	T 699.99
MARB-550 Rotor base accessory for MA-550 T	769.99
MARB-770 Rotor base accessory for MA-770 T	899.99
MARB-850 Rotor base accessory for MA-850 T	1099.99

All US TOWER products are drop-shipped (shipped direct to you from the US TOWER factory). On these factory drop-shippments we prefer payment in full with order, however, we will accept your credit card with the understanding that we will process the charge when we order the merchandise from the factory. This means that you may be billed before you receive your drop-shipped merchandise. Shipment is FOB Visalia, California or Lincoln, Kansas via truck, COD for freight charges only. Freight charges will be collected upon delivery by the carrier. Please allow sufficient time for delivery on these special order products. Most truck lines will not unload the tower for you, so please be sure to have enough manpower and/or equipment on hand when your tower is delivered by the carrier.

UNADILLA (See W2AU)**UNIDEN (UNI)**

PC-68Elite AM Mobile CB w/WX alert	\$ 99.99
PC-68LTW AM Mobile CB w/WX alert	79.99
PC-68XL AM Mobile CB	74.99
PC-78Elite AM Mobile CB w/WX alert	119.99
PC-78LTW AM Mobile CB w/WX alert	99.99
PC-78XL AM Mobile CB	94.99
PRO-510XL AM Mobile CB	39.99

Uniden - continued

PRO-520XL AM Mobile CB	54.99
PRO-538W AM Mobile CB w/WX	59.99

UNIDEN BEARCAT

BC-244CLT 30 ch scanner w/instant WX	\$ 99.99
BC-248CLT 50 ch scanner w/WX alert	109.99
BC-278CLT 100 ch scanner/SAME WX alert ..	139.99
BC-350A 50 ch prog/service search/AC ps D	89.99
BC-350C 100 ch prog/service search w/AC ps	99.99
BC-785D 1000 ch scanner/trunk/SAME WX	289.99
BCI-25D Digital board for BC-785D	239.99
BC-780XLT 500 ch scanner/trunk/SAME WX D	269.99
BC-795D 1000 ch pocket/trunk/SAME WX/dig	549.99
BC-950CLT 300 ch prog scanner/trunking	199.99
BCT-8 Preprog warning scan/800/trunk/AC ps	179.99
BC-003 Switch box for BC-002	2.99
BC-60XLT-1 30ch prog pocket; use AA batts ..	89.99
BC-80XLT 50 ch prog pocket scanner/800	119.99
AA-502 Cig power cord	11.99
AD-100 AC adapter/batt cgr; earlier scanners	6.99
AD-140 Extra charger; BC-100XLT/200XLT	13.99
BP-200 Extra battery; BC-200XLT	26.99
BP-205 Extra battery; BC-100XLT	26.99
SC-180B 100 ch sport pocket/800 MHz	169.99
SC-200 200 ch sport pocket/800 MHz	199.99
AD-70 Extra charger	10.99
BP-120 Extra battery	18.99
LC-120 Carrying case; BC120XLT/230XLT ..	19.99
(KOS) 02/99 Noise reduction headphones ..	59.99
AA-502 Cig power cord	11.99
BC-245XLT 300 ch pocket/trunk/smart scan	209.99
AD-70 Extra charger	10.99
BP-180 Extra battery	16.99
CRX-120 Desk charger; BC-245XLT	24.99
LC-120 Carrying case	19.99
UA-502 Cig power cord	11.99
BC-250D 1000 ch pocket/trunk/SAME WX	269.99
BCI-25D Digital board for BC-250D	239.99
BP-250 Extra battery	14.99
NC-250D Carrying case	29.99
UA-502 Cig power cord	11.99
BC-296D 1000 ch pocket/trunk/SAME WX/dig	549.99
BP-2500 Extra batt; BC2500/3000	63.99
RFD-001 IN/LK/OH/MI free book	99
Atlantis-250 5w VHF marine handheld	99.99
Voyager 5w VHF marine handheld/lith ion batt	159.99
Mystic 5w VHF marine handheld/GPS/DSC	339.99
Solara 25w 90 ch VHF marine Xcvr	99.99
Oceanus 25w 90 ch VHF marine Xcvr	129.99
Oceanus-DSC 25w 90 ch VHF marine Xcvr/DSC	139.99
Polaris 25w VHF marine Xcvr w/hailer	179.99

Unified Microsystems (UNM)

VK-64 CW/voice keyer	\$229.99
CK-4 CW cable for VK-64 to transceiver	9.99
VKC-8 8-pin audio cable for VK-64 to Xcvr	24.99
XT-4 Small size CW memory keyer	69.99
CK-4 CW cable for XT-4 to transceiver	9.99
W9XT Contest card for IBM PC & compatible	139.99
CCC-8 8pin mic contest card cable semi-kit	44.99

UNI-SOLAR (UNS)

USF-5/FLX-5 5w flexible solar cell	\$ 89.99
USF-32/FLX-32 32w flexible solar cell	269.99

Universal Towers (UNT)

4-30 4 sq ft wind load 30' alum tower	T \$325.99
9-30 9 sq ft wind load 30' alum tower	T 438.99
12-30 12 sq ft wind load 30' alum tower	T 576.99
21-30 21 sq ft wind load 30' alum tower	T 679.99
23-30 23 sq ft wind load 30' alum tower	T 899.99
35-30 35 sq ft wind load 30' alum tower	T 1019.99

Universal - continued AES Price

4-40	4 sq ft wind load 40' alum tower	.....T	539.99
7-40	7 sq ft wind load 40' alum tower	.....T	679.99
9-40	9 sq ft wind load 40' alum tower	.....T	759.99
12-40	12 sq ft wind load 40' alum tower	.....T	899.99
15-40	15 sq ft wind load 40' alum tower	.....T	1013.99
21-40	21 sq ft wind load 40' alum tower	.....T	1119.99
23-40	23 sq ft wind load 40' alum tower	.....T	1339.99
4-50	4 sq ft wind load 50' alum tower	.....T	769.99
5-50	5 sq ft wind load 50' alum tower	.....T	869.99
7-50	7 sq ft wind load 50' alum tower	.....T	979.99
9-50	9 sq ft wind load 50' alum tower	.....T	1089.99
15-50	15 sq ft wind load 50' alum tower	.....T	1449.99
16-50	16 sq ft wind load 50' alum tower	.....T	1569.99
4-60	4 sq ft wind load 60' alum tower	.....T	1089.99
6-60	6 sq ft wind load 60' alum tower	.....T	1339.99
7-60	7 sq ft wind load 60' alum tower	.....T	1429.99
9-60	9 sq ft wind load 60' alum tower	.....T	1529.99
3-70	3 sq ft wind load 70' alum tower	.....T	1379.99
4-70	4 sq ft wind load 70' alum tower	.....T	1749.99
6-70	6 sq ft wind load 70' alum tower	.....T	1779.99
7-70	7 sq ft wind load 70' alum tower	.....T	1869.99
3-80	3 sq ft wind load 80' alum tower	.....T	1919.99
4-80	4 sq ft wind load 80' alum tower	.....T	2229.99
2-90	2 sq ft wind load 90' alum tower	.....T	2299.99
B-14	Base for tower	.....	65.99
B-18	Base for tower	.....	65.99
B-22	Base for tower	.....	103.99
B-26	Base for tower	.....	132.99
Extra 14"	stubs (between base & tower)	.set	14.99
Extra 18"	stubs (between base & tower)	.set	26.99
Extra 22"	stubs (between base & tower)	.set	42.99
Extra 26"	stubs (between base & tower)	.set	42.99
Extra 30"	stubs (between base & tower)	.set	63.99
RFM-11	Flat roof mt for guyed tower	.....	46.99
RFM-14	Flat roof mt for guyed tower	.....	46.99
RFM-18	Flat roof mt for guyed tower	.....	69.99
RFM-22	Flat roof mt for guyed tower	.....	97.99
RFM-26	Flat roof mt for guyed tower	.....	129.99
R-11	Rotor mount	.....	31.99
R-14	Rotor mount	.....	46.99
R-18	Rotor mount	.....	62.99

SEE LITERATURE FOR TOWER CONFIGURATIONS

11 Top 11"	top tower section	.....T	110.99
14 Top 14"	top tower section	.....T	138.99
18 Top 18"	top tower section	.....T	252.99
14 Taper 14"	taper tower section	.....T	122.99
18 Taper 18"	taper tower section	.....T	219.99
22 Taper 22"	taper tower section	.....T	327.99
26 Taper 26"	taper tower section	.....T	440.99
11 Straight 11"	straight tower section	.....T	108.99
14 Straight 14"	straight tower section	.....T	122.99
18 Straight 18"	straight tower section	.....T	219.99
22 Straight 22"	straight tower section	.....T	327.99
26 Straight 26"	straight tower section	.....T	440.99
HD35-40	35 sq ft wind load 40' alum tower	T	1569.99
HD21-50	21 sq ft wind load 50' alum tower	T	1669.99
HD9-60	9 sq ft wind load 60' alum tower	..T	1759.99
HD16-60	16 sq ft wind load 60' alum tower	T	2119.99
HD21-60	21 sq ft wind load 60' alum tower	T	2229.99
HD8-70	8 sq ft wind load 70' alum tower	..T	1979.99
HD12-70	12 sq ft wind load 70' alum tower	T	2449.99
HD17-70	17 sq ft wind load 70' alum tower	T	2669.99
HD21-70	21 sq ft wind load 70' alum tower	T	2779.99
HD8-80	8 sq ft wind load 80' alum tower	..T	2529.99
HD9-80	9 sq ft wind load 80' alum tower	..T	2639.99
HD11-80	11 sq ft wind load 80' alum tower	T	2999.99
HD12-80	12 sq ft wind load 80' alum tower	T	2999.99
HD16-80	16 sq ft wind load 80' alum tower	T	3219.99

Universal - continued AES Price

HD4-90	4 sq ft wind load 90' alum tower	.....T	2629.99
HD8-90	8 sq ft wind load 90' alum tower	..T	3109.99
HD11-90	11 sq ft wind load 90' alum tower	T	3549.99
HD4-100	4 sq ft wind load 100' alum tower	T	3529.99
HD8-100	8 sq ft wind load 100' alum tower	T	3779.99
B-30	Base for HD tower	.....	207.99
RFM-30	Flat roof mt for guyed tower	.....	180.99
1-5/8SC	Flange bearing	.....	98.99
2-3/16SC	Flange bearing	.....	109.99
Top Plate	Flange plate welded to top section	.....	23.99

SEE LITERATURE FOR TOWER CONFIGURATIONS

30 Taper 30"	taper tower section	.....T	554.99
30 Straight 30"	straight tower section	.....T	554.99
1-1/4" OD x 5 ft	aluminum mast	.....T	23.99
1-1/4" OD x 10 ft	aluminum mast	.....T	33.99
1-1/2" OD x 10 ft	aluminum mastT	41.99
2" OD x 8 ft	aluminum mast	49.99
2" OD x 16 ft	aluminum mastT	95.99

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VALOR (See PRO AM)

VANCO (VCO)

370052	3 1/2 digit multimeter	\$ 19.99
HF-24RS	Scanner headphones w/dual volume	19.99
SWR-1	SWR/field strength meter	.....	19.99
SWR-3	Mini SWR meter	.....	14.99

VAN GORDEN (VAN)

Hi-Q 1:1	balun	.....	\$ 14.99
Hi-Q 4:1	balun	.....	14.99
Antenna center insulator	.....	6.99	
Antenna end insulator	.....pair	4.99	
Dog bone type antenna insulator	.....each	.99	
NR-100	Nylon antenna guy rope	.....100 ft.	4.99
NR-1000	Nylon ant guy rope	.....1000 ft.	44.99
D-80	80m 130' wire dipole antenna	.....	32.99
SD-80	Short 90' 80m dipole	.....	36.99
D-40	40m 66' wire dipole antenna	.....	29.99
SD-40	Short 45' 40m dipole	.....	34.99
D-20	20m 33' wire dipole antenna	.....	28.99
D-15	15m 22' wire dipole antenna	.....	27.99
D-10	10m 16' wire dipole antenna	.....	26.99
All Bander	Dipole 160-10m (use tuner) 135' ant	.....	29.99
Shorty All Bander	160-10m (use tuner) 70' ant	.....	44.99
G5RV	Flat-top 3.5-30 102' ant/kmfr/100' cable	.....	50.99
G5RV-E	Flat-top 3.5-30 102' ant/31' twinlead	.....	28.99
G5RV JR	Flat-top 7-30 52' ant/17' twinlead	.....	24.99
G5RV-M	Flat-top 1.8-30 204' ant/65' twinlead	.....	50.99
N connector	Type N connector for 9913/8214	.....	4.99
#14	Stranded hard drawn ant wire	.....100 ft.	11.99
#14	Stranded hard drawn ant wire	.....150 ft.	16.99
300 ohm	1kw transmitting twinlead	.....100 ft.	19.99
450 ohm	18ga solid ladderline	.....100 ft.	14.99
450 ohm	18ga solid ladderline	.....1000 ft.	109.99
450 ohm	14ga stranded ladderline	.....100 ft.	29.99
450 ohm	14ga stranded ladderline	.....1000 ft.	229.99
(WA1)	WA1FFL Ladder-LoC	450 ohm ctr ins	12.99
RG-213	Non-contaminating	.....per ft.	.49

Van Gorden - continued AES Price

RG-213/500	Non-contaminating .500 ft. Roll	.....	179.99
8X-15ST	1.5' RG-8X coax/silver teflon PL259s	.....	7.99
8X-3ST	3' RG-8X coax/silver teflon PL259s	.....	8.99
8X-6ST	6' RG-8X coax/silver teflon PL259s	.....	10.99
8X-12ST	12' RG-8X coax/silver teflon PL259s	.....	11.99
8X-25ST	25' RG-8X coax/silver teflon PL259s	.....	15.99
8X-50ST	50' RG-8X coax/silver teflon PL259s	.....	24.99
8X-75ST	75' RG-8X coax/silver teflon PL259s	.....	31.99
8X-100ST	100' RG-8X coax/silver teflon PL259s	.....	37.99
213-25ST	25' RG-213 coax/silver teflon PL259s	.....	25.99
213-50ST	50' RG-213 coax/silver teflon PL259s	.....	38.99
213-75ST	75' RG-213 coax/silver teflon PL259s	.....	54.99
213-100ST	100' RG-213 coax/silver teflon PL259s	.....	72.99

VECTRONICS (VEC)

VC-300M	300w mobile antenna tuner	.....	\$ 99.99
VC-300DLP	300w antenna tuner	.....	149.99
VC-300D	300w digital antenna tuner	.....	179.99
HFT-1500	1.5kw antenna tuner	.....	399.99
AT-100	.3-30 MHz active antenna/tuner	.....	79.99
HPF-1	High pass filter, 75 or 300 ohms	.....	24.99
HPF-2	Deluxe high pass filter, 75 or 300 ohms	.....	29.99
LP-30	1.5kw low pass filter	.....	69.99
LP-2500	2.5kw low pass filter	.....	129.99
DL-300M	300w 150MHz dummy load	.....	44.99
DL-650M	1.5kw 650MHz dummy load	.....	74.99
DL-2500	2.5kw 150MHz dummy load	.....	179.99
PM-30HF	300/3kw HF wattmeter	.....	79.99
PM-30UV	30/300w VHF/UHF wattmeter	.....	89.99
121K	Crystal radio set kit	.....	19.99
131K	Aircraft receiver kit	.....	29.99
201K	CK keyer kit	.....	24.99
412K	Nicad/NiMH battery conditioner kit	.....Δ	29.99
422K	FM broadcast SCA decoder kit	.....	27.99
830K	Super SSB audio filter kit	.....	19.99
841K	Tunable SSB/CW audio filter kit	.....	34.99
1140K	40m receiver kit	.....	29.99
1240K	40m QRP CW transmitter kit	.....	29.99
1290K	AM radio transmitter kit	.....	29.99
1294K	TV transmitter kit	.....	27.99
1402K	2m preamp kit	.....Δ	9.99

VELLEMAN (VEL)

AVW-089	3 channel audio/video switcher	.....	\$ 8.99
DVM-810	3 1/2 digit digital multimeter	.....	9.99
DVM-850BL	Deluxe 3 1/2 digit DMM w/holder	.....	19.99
VT-COAX	Coax stripper; RG-58/59/62/6	.....	14.99
VT-LAMP2U	Magnifier lamp for hobbyists	.....	49.99
VT-SET3N	6-pc electronics screwdriver set	.....	7.99
VT-SET21N	8-in-1 screwdriver set	.....	4.99
VT-TS	25-piece hobbyist tool set	.....	9.99

VIBROPLEX (VIB)

090	Original Gold Bug	.....	\$309.99
100	Original Presentation Super deluxe bug	.....	269.99
105	Original Deluxe Bug	.....	199.99
110	Original Standard Bug	.....	169.99
113	VibroKeyer Gold Paddle	.....	279.99
115	VibroKeyer Deluxe Paddle	.....	184.99
120	VibroKeyer Standard Paddle	.....	149.99
123	Iambic Gold Paddle	.....	279.99
125	Iambic Presentation Paddle	.....	249.99
130	Iambic Deluxe Paddle	.....	189.99
135	Iambic Standard Paddle	.....	149.99
145	Triangular Brass Racer Iambic paddle	.....	129.99
150	Square Brass Racer Iambic paddle	.....	139.99
153	Gold straight key	.....	279.99
155	Standard straight key	.....	149.99
160	Deluxe straight key	.....	189.99
162	Gold Hand key/Iambic Paddle double	.....	369.99
163	Gold Hand key/VibroKeyer Paddle double	.....	369.99

Vibroplex - continued AES Price

165 Deluxe Hand key/lambic Paddle double	329.99
170 Dlx Hand key/Vibrokeyer Paddle double	329.99
175 Standard Hand key/lambic Paddle double	279.99
180 Std Hand key/Vibrokeyer Paddle double Δ	249.99
185 Square Racer Deluxe lambic paddle	129.99
190 Square Racer Standard lambic paddle	109.99
195 Blue Racer 2000 Std Millennium Bug	189.99
198 Blue Racer 2000 Dlx Millennium Bug	209.99
200 Code Warrior Junior Paddle	99.99

WA1FFL (WA1)

Ladder-Loc 450 ohm ladderline center attach	\$ 12.99
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W2AU (Unadilla) (W2A)

W2AU 1:1 160-10m balun, lightning arrestor	\$ 24.99
W2AU 4:1 160-10m balun, lightning arrestor	24.99
W2AU Beam Balun, 1:1	24.99
W2DU-HF 1:1 1.8-30 MHz choke balun	26.99
W2DU-VHF 1:1 30-250 MHz choke balun	26.99
W2DU Beam Balun 40-10m 1:1 choke balun	26.99
HA Ant-sulator center insulator	9.99
HE END-sulator end insulators	6.99
KW-80CW Reyco 80m CW ant traps	48.99
KW-80F Reyco 75m phone ant traps	48.99
KW-40 Reyco 40m antenna traps	42.99
KW-30 Reyco 30m antenna traps	42.99
KW-20 Reyco 20m antenna traps	41.99
KW-17 Reyco 17m antenna traps	41.99
KW-15 Reyco 15m antenna traps	41.99
KW-12 Reyco 12m antenna traps	41.99
KW-10 Reyco 10m antenna traps	41.99
W2AU/W2VS 5-band ant kit (use tuner)	85.99

W5YI (W5Y)

BCOM Basic Communications Electronics book	\$ 17.99
BDIG Basic Digital Electronics book	17.99
BELC Basic Electronics book	17.99
ECS-02 Extra upgrade software/manual/code	39.99
GROL Commercial license elements 1/3/8 manual	39.99
GRSP Commercial study software w/GROL book	69.99
GSTD Getting Started in Electronics book	17.99
GUS General upgrade soft/manual/code	34.99
GUS-04 General upgrade software/manual/code	39.99
GW05 Gordon West 6 ea 0-5 wpm code tapes	29.99
GW13 Gordon West 6 ea 5-16 wpm code tapes	29.99
GW20 Gordon West 6 ea 10-28 wpm code tapes	29.99
GWCT Gordon West refresher code course audio CDs	14.99
GWEM-02 Gordon West Extra study manual	19.99
GWEW-02 Gordon West 6 ea Extra theory tapes	29.99
GWGM Gordon West General study manual	12.99
GWGM-04 Gordon West General study manual	17.99
GWGW Gordon West 4 ea General theory tapes	19.99
GWGW-04 Gordon West 4 ea General theory tapes	24.99
GWTM-03 Gordon West Tech study manual	15.99
GWTW-03 Gordon West 6 ea Tech theory tapes	34.99
HOS-03 Ham op software/code (all classes) D	39.99
HOS-04 Ham operator software/code (all classes)	39.99
HOSB-03 Ham op soft/code/3 books (all classes) D	69.99
HOSB-04 Ham op soft/code/3 books (all classes)	79.99
Mini-1 Timer, op amp & optoelectronics	10.99
Mini-2 Science & communications	10.99
Mini-3 Electronic sensors	10.99
Mini-4 Electronic formulas, symbols & circuits	10.99
NCS-03 Technician software w/manual	39.99
TPG-03 Tech/General soft/manuals/code	54.99
TPG-04 Tech/General software/manuals/code	59.99
WMC 0-48 wpm code software	14.99

WAHL (WAH)

7740 Quick charge cordless soldering iron kit	\$ 47.99
7971 30 minute butane soldering iron	19.99
7974 120 minute butane soldering iron	27.99

AES Price

Watson Guptill (WAT)

059685 2004 World Radio TV Handbook	\$ 29.95
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WELLER (WEL)

7200PK 75w soldering gun kit	\$ 28.99
7235 Extra standard tips (2) for 7200PK	3.99
SP-23LK 25w soldering iron kit	17.99
WP-25 25w professional soldering iron	34.99
ST-4 ¼" screwdriver tip for WP-25	4.99
ST-5 ½" single flat tip for WP-25	4.99
W-60P 60w temp controlled soldering iron	64.99
CT-5E7 ¾" screwdriver tip for W-60P	6.99
WESD51 50w adjustable soldering station	149.99
WST3 Pyrophen portable LP soldering iron	99.99
WST2 Pyrophen Jr. portable butane iron	89.99
WTCPT 60w temp controlled soldering stn	119.99

West Mtn Radio (WES)

RB/PL/C Righblaster Pro; 8-pin/RJ-45	\$249.99
RB/PL/C Righblaster Plus; 8-pin/RJ-45	139.99
RB/M8/C Righblaster; 8-pin/RJ-45	109.99
RB/NO/8C Righblaster nomic for 8-pin radios	59.99
RB/NO/RJC Righblaster nomic for RJ-45 radios	59.99
RB/NO/FT100 Righblaster nomic; Yae modular 6	59.99
RR/4010S/C Rigrunner FET 9outlet/cbl/connectors	119.99
RR/4012/C Rigrunner 40A 12outlet/cbl/connectors	112.99
RR/4008/C Rigrunner 40A 8outlet/cbl/connectors	92.99
RR/4005/C Rigrunner 40A 5outlet/cbl/connectors	99.99
C30/PK/12 12pr PowerPole 30A connectors	10.99
CR/Tool Gardner Bender forged crimp tool	9.99
Whatt Meter WVA/AH meter for any powerpole	69.99

WILSON (WIL)

F6T-4/BLK 4' black fiberglass CB whip	\$ 27.99
F6T-4/WHI 4' white fiberglass CB whip	27.99
Little Wil Magnetic mt CB antenna	31.99
Trucker 2000 Black mobile ¼-24 CB whip	54.99
W-1000 Magnetic Black mobile CB antenna	76.99
W-1000 Roof Top Black mobile CB antenna	57.99
W-1000 Trunk Lip Black mobile CB antenna	65.99

WINEGARD (WIN)

CX-0625 25' RG-6 TV coax w/F connectors	\$ 10.99
CX-0650 50' RG-6 TV coax w/F connectors	15.99
CX-0675 75' RG-6 TV coax w/F connectors	19.99
CX-6100 100' RG-6 TV coax w/F connectors	24.99
PR-7010 22 el 66.5" boom Prostar TV ant	39.99
PR-7032 33 el 103.25" boom Prostar TV ant	64.99
PR-7042 43 el 149.75" boom Prostar TV ant	99.99
TV-2900 Outdoor TV matching transformer	2.99

YAESU (YAE)

FT-100MP Mk V 200w HF Xcvr/EDSP/tuner/ps	2089.99
Mk V Field 100w HF Xcvr/EDSP/tuner/ps	1739.99
DVS-2 Digital voice recording module	219.99
FH-1 Remote control keypad	88.99
FTV-1000 200w 6m transverter; Mk V	899.99
FP-29 30vdc ps; FTV-1000 w/orig MP/Field	499.99
FRB-5 Relay board; FTV-1000 w/orig MP	50.99
MD-100A8X Desk mic w/tone control	129.99
MD-200A8X Deluxe high fidelity desk mic	379.99
MH-31B8 Extra hand microphone	39.99
SP-8 External speaker w/filters	159.99
LL-7 Phone patch unit for SP-8	139.99
TCX0-6 Deluxe TCXO unit, 0.5 ppm	174.99
YF-110CN 250 Hz 3rd IF main Rcvr CW filt	144.99
YF-110SN 2 KHz 3rd IF main Rcvr SSB filt	144.99
YF-114CN 250 Hz 2nd IF main Rcvr CW filt	144.99
YF-114SN 2 KHz 2nd IF main Rcvr SSB filt	144.99
YF-115C 500 Hz CW Collins mech filter	159.99
YH-77STA Open-air type stereo headphones	51.99

Yaesu - continued

AES Price

FT-847 HF/6m/2m/430 Earth Station Xcvr/mic	1569.99
(W4R) Antenna Boss interface; other mfr mot ant	179.99
FP-1023 23A switching ps w/fan, 25A surge	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
ATAS-120 HF/6/2/430 motorized mob ant	299.99
ATBK-100 Antenna base kit; use w/base mt	89.99
CT-39A Packet cable	9.99
CT-61 Interface cable; FT-847 to amp	15.99
FC-20 Automatic antenna tuner	269.99
FVS-1A Voice synthesizer	43.99
MD-100A8X Desk mic w/tone control	129.99
MD-200A8X Deluxe high fidelity desk mic	379.99
MH-3608 TTP mobile microphone	60.99
MMB-66 Mobile mounting bracket	39.99
SP-8 External speaker w/filters	159.99
T-9018320 Extra DC cable	26.99
YF-115C 500 Hz CW Collins mech filter	159.99
YF-115S-02 2.5 KHz SSB Collins mech filt	159.99
YH-77STA Open-air type stereo headphones	51.99
FT-840 HF Xcvr/SW Rcvr/mic	579.99
FP-1023 23A switching ps w/fan, 25A surge	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
FC-10 External coax fed auto tuner	379.99
FC-800 External long wire auto tuner	439.99
FM-232C Interface for RS-232	95.99
FIF-747 FM unit	62.99
MD-100A8X Desk mic w/tone control	129.99
*Cable needed for FT-840; contact service for info	
MD-200A8X Deluxe high fidelity desk mic	379.99
MLS-100 Mobile speaker	45.99
MMB-20 Mobile mount	34.99
SP-6 External speaker w/filter	144.99
T-9018320 Extra DC cable	26.99
TCX0-4 TCXO unit	99.99
YF-112A 6 KHz AM filter	119.99
YF-112C 500 Hz CW filter	119.99
YH-77STA Open-air type stereo headphones	51.99
FT-897D HF/6m/2m/430 port/base Xcvr/TCXO	889.99
(W4R) Antenna Boss interface; other mfr mot ant	179.99
(W4R) OTT-897 One-touch tune; 817/857/897	64.99
FP-30 Internal power supply	209.99
ATAS-120 HF/6/2/430 motorized mob ant	299.99
ATBK-100 Antenna base kit; use w/base mt	89.99
CT-39A Packet cable	9.99
CT-62 CAT interface cable	29.99
FC-30 Antenna tuner; bolts to FT-897	239.99
FNB-78 4.5ah NiMH batt (will accept 2)	99.99
CD-24 4-hr charge adapter for FNB-78	119.99
PA-26B 110vac charger for CD-24	85.99
MD-100A8X Desk mic w/tone control	129.99
MD-200A8X Deluxe high fidelity desk mic	379.99
MH-36E8J TTP mic	60.99
MH-59A8J Remote control TTP mic	64.99
MLS-100 Mobile speaker	45.99
MMB-80 Mobile mounting bracket	35.99
SP-6 External speaker w/filter	144.99
T-9023225 Extra DC cable	26.99
YF-122C 500 Hz Collins CW filter	159.99
YF-122CN 300 Hz Collins CW filter	159.99
YF-122S 2.3 KHz Collins SSB filter	159.99
YH-77STA Open-air type stereo headphones	51.99
FT-857D Mini HF/6m/2m/430 Xcvr/DSB	779.99
(W4R) Antenna Boss interface; other mfr mot ant	179.99
(W4R) OTT-897 One-touch tune; 817/857/897	64.99
FP-1023 23A switching ps w/fan, 25A surge	159.99
FP-1030A 25A ps, 30A surge w/meters	249.99
ATAS-120 HF/6/2/430 motorized mob ant	299.99
ATBK-100 Antenna base kit; use w/base mt	89.99
CT-39A Packet cable	9.99
CT-58 Band data cable; Yaesu amplifier	29.99
CT-62 CAT interface cable	29.99

Yaesu - continued

AES Price

FC-30	Antenna tuner; bolts to FT-897	239.99
MD-100A8X	Desk mic w/tone control	129.99
MD-200A8X	Deluxe high fidelity desk mic	379.99
MH-36E8J	TTP mic	60.99
MH-59A8J	Remote control TTP mic	64.99
MLS-100	Mobile speaker	45.99
MMB-67	Quick release bracket	29.99
SP-6	External speaker w/filter	144.99
2T-902325	Extra DC cable	26.99
TCXO-9	TCXO unit, 0.5 ppm	99.99
YF-122C	500 Hz Collins CW filter	159.99
YF-122CN	300 Hz Collins CW filter	159.99
YF-122S	2.3 KHz Collins SSB filter	159.99
YH-77STA	Open-air type stereo headphones	51.99
YSK-857	Separation kit	54.99
FT-817ND	5w HF/6/2/430 Xcvr/FNB85/NC72B (W4R) OTT-1 One-touch tune for FT-817 ..D (W4R) OTT-897 One-touch tune; 817/857/897	629.99
ATAS-25	40/20/15/10/6/2/430 7.2 port ant	229.99
CSC-83	Soft case w/side pocket for FT-817	25.99
CT-39A	Packet cable	9.99
CT-62	CAT interface cable	29.99
EDC-6	Extra DC cord; plug & wire only	7.99
FNB-72	9.6v 1000mah nicad battery	60.99
MH-36E8J	TTP mic	60.99
MLS-100	Mobile speaker	45.99
NC-72B	Extra nicad wall charger	18.99
TCXO-9	TCXO unit, 0.5 ppm	99.99
YF-122C	500 Hz Collins CW filter	159.99
YF-122CN	300 Hz Collins CW filter	159.99
YF-122S	2.3 KHz Collins SSB filter	159.99
DSP-2	DSP unit for original FT-857	66.99
FM-1	FM unit for FT-920	62.99
FP-1023	23A switching ps w/fan, 25A surge	159.99
FP-1030A	25A ps, 30A surge w/meters	249.99
SP-5	External spkr w/audio filter	144.99
T-9021925	Extra DC cord; FT-100D	42.99
TCXO-7	TCXO unit for FT-920	99.99
XF-117A	6 KHz AM filter; FT-100D	119.99
XF-117CN	300 Hz CW filter; FT-100D	89.99
YA-30	1.8-30 MHz broadband dipole ant	229.99
YF-116A	6 KHz AM filter for FT-920	119.99
YF-116C	500 Hz CW filter for FT-920	119.99
YH-77STA	Open-air type stereo headphones	51.99
YS-60	1.8-60 MHz 2kw PEP wattmeter	129.99
YS-500	140-520 MHz 200w PEP wattmeter	109.99
YSK-100	Separation kit for FT-100D	79.99
Quadra System	VLP1000 HF+6m amp/ps/tuner	3999.99
FRG-100B	1.1-30 MHz shortwave receiver	599.99
FIF-232C	Interface for RS-232	95.99
FM Unit-100	FM unit	47.99
TCXO-4	TCXO unit	99.99
YF-110CN/XF-F	250 Hz CW xtal filter	144.99
YF-115C	500 Hz CW Collins mech filter	159.99
VR-120D	1MHz-12.995GHz AM/FM hand/cell bkld	199.99
CA-34	Charger sleeve; NC-82/VR-120D	4.99
CSC-76	Soft case for VR-120/D	19.99
CT-35	Clone cable; VR-120/D	9.99
EDC-15	DC adapter	38.99
FNB-79	Nicad battery for VR-120D	8.99
NC-82	Charger stand	8.99
PA-30B	AC adapter	7.99
VR-500	1M-1.3G AM/FM/SSB hand/cell bkld	299.99
ADMS-3	Windows programming software	38.99
CSC-72	Soft case for VR-500	19.99
EDC-5B	DC adapter w/noise filter	26.99
EDC-6	DC adapter; plug & wire only	7.99
FNB-59	Nicad battery for VR-500	29.99
NC-60B	Wall charger	14.99
VR-5000	1M-2.6G base/rwr AM/FM/SSB/cell bkld	599.99
DSP-1	DSP unit	119.99

Yaesu - continued

AES Price

DVS-4	Digital voice recorder	47.99
FVS-1A	Voice synthesizer	43.99
E-736	DC cable for FT-736R	16.99
FX-736-220	220 MHz module; FT-736R	309.99
AD-3	100w 2m/440 duplexer	52.99
FRC-4	DTMF pager unit; FT-5200/6200	99
FT-7800R	50w 2m/40w 440 FM Xcvr	279.99
CT-39A	Packet cable	9.99
MLS-100	Mobile speaker	45.99
MMB-60	Quick release mobile mount	29.99
SP-4	Mobile speaker	31.99
T-9021715	Extra DC cable	12.99
YSK-7800	Remote separation kit	54.99
FT-8800R	50w 2m/35w 440 FM Xcvr	369.99
ADMS-21	Windows programming software	38.99
CT-39A	Packet cable	9.99
MLS-100	Mobile speaker	45.99
MMB-60	Quick release mobile mount	29.99
MMB-62	Remote front panel mounting bkt	39.99
SP-4	Mobile speaker	31.99
T-9021810	Extra DC cable	12.99
YSK-8900	Remote separation kit	54.99
FT-8900R	50w 10m/6m/2m/35w 440 FM Xcvr	419.99
ADMS-2H	Windows programming software	38.99
CT-39A	Packet cable	9.99
MLS-100	Mobile speaker	45.99
MMB-60	Quick release mobile mount	29.99
MMB-62	Remote front panel mounting bkt	39.99
SP-4	Mobile speaker	31.99
T-9021810	Extra DC cable	12.99
YSK-8900	Remote separation kit	54.99
ADMS-2D	Prog soft; 3000/8000/8100/8500	38.99
ADMS-2E	Windows prog soft; FT-2600M/90R	38.99
ADMS-2G	Windows prog soft; FT-7100M	24.99
FRC-6	DTMF pager; 2400M/2500M/7400H	29
MH-36C8J	TTP microphone; late FT-2500M	59.99
MMB-48	Extra mobile bracket; FT-2600M	14.99
RA-0131900	Extra mobile bracket; FT-90R	4.99
RA-0242900	Extra mobile bkt; FT-1500M	9.99
YSK-900	Remote separation kit; FT-90R	54.99
YSK-7100	Rem separation kit; FT-7100M	59.99
YSK-8100	Rem separation kit; FT-8100R	69.99
FT-2800M	65w 2m FM Xcvr w/TTP mic	159.99
MLS-100	Mobile speaker	45.99
S-8002051/MMB-83	Extra mobile bracket	4.99
S-8101436	Extra DC cable	7.99
SP-4	Mobile speaker	31.99
ADMS-2F	Windows prog software; FT-1500M	38.99
FP-1023	23A switching ps w/fan, 25A surge	159.99
FP-1030A	25A ps, 30A surge w/meters	249.99
HRI-100	WIRES II interface box	149.99
LF-1	Mobile 13A DC noise filter	26.99
MLS-100	Mobile speaker	45.99
RA-0242900	Extra mobile bkt; FT-1500M	9.99
SP-4	Mobile speaker	31.99
VXR-7000VA	Vertex 50w 2m FM AC/DC rpt	1269.99
VX VPL-1	Repeater programming cables	87.99
Repeaters require service dept set-up; \$45 minimum		
Accs for FT-23/33/73/41/811/470/911		
CA-7	2 charging sleeves; NC-50/411E/470	2.99
CSC-24S	Soft case; FT-23/33/73 w/FNB-12S	19
CSC-35	Soft case; FT-411/811/911/FNB-17	29
FBA-17	AA battery holder	19.99
FNB-12S	12v 600mah 5w battery	49.99
FNB-17	7.2v 600mah battery	29.99
MH-34C2B	Compact lapel speaker/mic	9.99
NC-34B	Wall charger for FNB-14	2.99
NC-65B/NC-18B	Wall charger for FNB-12S	2.99
YH-2	Lightweight VOX headset w/mic	14.99

Yaesu - continued

AES Price

FT-50RD/41B	5w 2m/440 HT/FNB41/TTP	209.99
ADMS-1E	Windows programming software	38.99
CA-15	Charging stand; FT-10/40/50	27.99
NC-60B	Wall charger; FNB-40/41/CA-15	14.99
CLIP-10	Spring loaded belt clip	7.99
CN-3	BNC to SMA adapter; FT-50R	8.99
CSC-68	Soft case; FNB-41/FBA-15	16.99
CSC-V10	Cordura soft case; FT-10/40/50	27.99
CT-27A	Cloning cable	11.99
CT-53	Packet cable	9.99
EDC-5B	DC adapter w/noise filter	24.99
EDC-6	DC cord; plug & wire only	6.99
FBA-15	4-AA battery holder	19.99
FBA-21	6-AA battery holder	38.99
FEA-10	Earphone	9.99
FNB-41	9.6v 600mah 5w battery	58.99
FNB-V47	7.2v 1100mah battery w/belt clip	55.99
PA-17	Battery cable extender	29.99
LCC-100	Leather case/belt clip; 50/FNB41/V47	14.99
LCC-10S	Leather case/swivel; 50/FNB41/V47	31.99
MH-34B4B	Speaker/mic	30.99
MH-37A4B	Earpiece/microphone	30.99
NC-50	1-hour dual slot charger	92.99
CA-14	2 charging sleeves; NC-50	26.99
VC-25	VOX headset	62.99
Accessories for FT-11R/41R/51R		
CSC-61	Case; FT11R/41R/FNB33/38/FBA14	\$ 4.99
CSC-66	Soft case; FT51R/FNB33/38/FBA14	D 9.99
VX-150	5w 2m FM HT/batt/cgr/16-key TTP	119.99
ADMS-1F	Windows programming software	38.99
CN-3	BNC to SMA adapter	8.99
CT-27A	Cloning cable	11.99
CT-44	2-pin spkr/mic adapter	11.99
CT-53	Packet cable	9.99
EDC-5B	DC adapter w/noise filter	24.99
EDC-6	DC cord; plug & wire only	6.99
FBA-25	6 AA cell battery case	29.99
FNB-V57	7.2v 1100mah battery	57.99
FNB-64	Extra 7.2v 700mah battery	43.99
LCC-150/TT	Leather case	23.99
LCC-150S/TT	Leather case w/swivel	31.99
MH-34B4B	Speaker/mic	30.99
MH-37A4B	Earpiece/microphone	30.99
NC-72B	Extra wall charger	18.99
VAC-400B	1-hour desk top rapid charger	56.99
VC-25	VOX headset	62.99
VX-11R	500mw 2m/440 submini HT/lith ion	129.99
ADMS-1E	Windows programming software	38.99
CN-3	BNC to SMA adapter	8.99
CSC-71	Soft case for VX-1R	19.99
CT-44	2-pin spkr/mic adapter	11.99
CT-53	Packet cable	9.99
EDC-15	DC adapter	38.99
FBA-20	Battery holder	22.99
FEA-10	Earphone	9.99
FNB-52LI	Extra 3.6v 700mah lith ion batt	36.99
MH-34B4B	Speaker/mic	30.99
MH-37A4B	Earpiece/microphone	30.99
NC-66B	Extra 2 hour wall charger	18.99
VC-25	VOX headset	62.99
VX-2R	1.5w 2m/1w 440 submini HT/lith ion	179.99
CN-3	BNC to SMA adapter	8.99
CSC-90	Soft case	16.99
CT-27A	Cloning cable	11.99
CT-44	2-pin spkr/mic adapter	11.99
EDC-21	DC adapter	36.99
FNB-82LI	Extra 3.7v 1000mah lith ion batt	32.99
MH-34B4B	Speaker/mic	30.99
MH-37A4B	Earpiece/microphone	30.99
VC-25	VOX headset	62.99

Yaesu - continued

AES Price

VX-5R Black 5w 6m/2m/4.5w 440 HT/lith ion	219.99
VX-5RS Silver 5w 6m/2m/4.5w 440 HT/lith ion	219.99
ADMS-1E Windows programming software	38.99
CD-15A Charger stand (use with NC-72B)	29.99
CN-3 BNC to SMA adapter	8.99
CSC-73 Soft case	19.99
CT-27A Cloning cable	11.99
CT-44 2-pin spkr/mic adapter	11.99
CT-53 Packet cable	9.99
EDC-5B DC adapter w/noise filter	24.99
EDC-6 DC cord; plug & wire only	6.99
FBA-23 2 AA cell battery case	29.99
FNB-58L1 7.2v 1100mah lith ion batt	65.99
FNB-80L1 Extra 7.4v 1300mah lith ion batt	65.99
MH-34AB4 Speaker/mic	30.99
MH-37A4B Earpiece/microphone	30.99
NC-72B Extra wall charger	18.99
SU-1 Altitude/barometric pressure sensor	35.99
VC-25 VOX headset	62.99
VX-7R Silver 5w 6m/2m/440/300mw 220 FM HT	309.99
VX-7RB Black 5w 6m/2m/440/300mw 220 FM HT	309.99
ADMS-1G Windows programming software	38.99
CT-91 Microphone adapter	10.99
CD-15A Charger stand (use with NC-72B)	29.99
CMP-460A Waterproof speaker/mic	54.99
CN-3 BNC to SMA adapter	8.99
CSC-88 Soft case	14.99
CT-91 Microphone adapter	10.99
EDC-5B DC adapter w/noise filter	24.99
EDC-6 DC cord; plug & wire only	6.99
FBA-23 2 AA cell battery case	29.99
FNB-80L1 Extra 7.4v 1300mah lith ion batt	65.99
MH-57A4B Speaker/mic	30.99
NC-72B Extra wall charger	18.99
SU-1 Altitude/barometric pressure sensor	35.99
VC-27 Earpiece/microphone	30.99

ANTENNA ROTORS

G-450A 10 sq ft antenna rotor/5-wire	259.99
G-550 12 sq ft elevation rotor/6-wire	299.99
G-800SA Med/hvy duty 450 degree 17sq ft/5-wire	339.99
G-800DXA Med/hvy duty 17sq ft/presets/5-wire	429.99
G-1000DXA HD 450 degree 23sq ft/presets/6-wire	519.99
G-2800DXA HD 450 degree 34sq ft/presets/6-wire	1139.99
Note: G-2800DXA comes w/40m (131') of rotor cable	
G-5500 11 sq ft azimuth/elevation rotor/26-wire	629.99
GA-3000 Tower absorber joint; G-1000/2800 D	119.99
GC-038 Mast clamp; G-450/800/1000/5500	31.99
GC-048 Mast clamp; G-2800	47.99
GL-33 Mast adjustment plate	14.99
GS-050 50mm thrust bearing; mast 1 1/2" - 2"	31.99
GS-065 65mm thrust bearing; mast 1 1/2" - 2"	47.99
GS-232A Computer interface; DXA rotors	539.99
C-1000 Interface cable; GS-232A - SDX/G5500	29.99
GS-680U Universal self-adjusting mast bearing	99.99
Sep Kit Separation kit for G5500	23.99

See BELDEN for rotor cable

CONSUMER ELECTRONICS

VXA-150 Deluxe Pro V 5w air handheld	\$299.99
VXA-210 Pilot 5w air handheld w/VOR	299.99
VXA-210 Deluxe Pilot 5w air handheld w/VOR	354.99
VXA-700 Spirit 5w air handheld/2m FM ham	419.99
FNB-53 Nicad battery pack; Yaesu FRS	1.99

CLOSE-OUTS

ALI DR-135TP Black 50w 2m FM/TT/1200/9600 TNC	\$249.99
ALI EJ-40U Dig board; DR-135TP/235T/435T	99.99
ALI EJ-43U Digital board for DJ-596T	99.99
ALP Pathfinder 1.8-30+6m dig auto ant tuner	399.99
ALP Pathfinder 1.8-54 dig 6pos switch/protect	149.99
AOR SDU-5500 Spectrum disp unit/PC interf	999.99
B&W ACS-1.8-30 Continuous 1.8-30 stainless vee	339.99

Close-Outs - continued

AES Price

B&W AC-5-30 5-30 MHz 65' folded dipole	169.99
B&W ACS-5-30 5-30 MHz stainless 65' folded dip	249.99
B&W AS-40 40/20/15/10m 40' trap dipole	149.99
B&W AS-160 160/80/40/20m 137' trap dipole	149.99
B&W AXS-80 80/40/15m 65' trap dipole ant	89.99
B&W BWDS-1.8-30 1.8-30 stainless 90' folded dip	299.99
B&W BWDS-65 4-30 MHz stainless 65' folded dip	319.99
B&W BWDS-90 1.8-30 stainless 90' folded dip	339.99
BEL 8018 #8 alum gnd wire	500 ft. Roll 69.99
BEL 9251 RG-8a (non-contam)	500 ft. Roll 279.99
BEN BY-3 Iambic keyer paddle, gold plated	299.99
BUS 78-0040 90mm refractor telescope	369.99
BUS 78-0200 4.5" reflector telescope	269.99
CEL 11015 Celestar 8" telescope	999.99
CEL 11033 NexStar 5i telescope	899.99
CEL 52211 60mm wildlif zoom spot scope/tripod	169.99
CMT CQ-5M Dlx black DC trunk lip mt/coax	66.99
CMT GP-24S 2.4GHz 9.9db 3' 7" N base/rptr	89.99
COB 21LTD ST Sound Tracker AM Mobile CB	69.99
DAV 0271 Turbo Meter handheld dig wind indicator	79.99
DAV 7866 Weatherlink Mac interface/software	99.99
DIA F-23C1 148-154MHz 7.8db 15' comm base	149.99
DIA F-718L 420-430 11.5db ATN N base ant	159.99
GAR eMAP Deluxe GPS/mapping/8MB card/CBL	199.99
GAR GPS-III Plus Handheld/dash mt map GPS	299.99
GAR NavTalk Analog cell phone/GPS combo	169.99
GRUYACT Boy 300PE Port AM/FM/SW/LW Rcvr	79.99
H8Z 1500 Firebird II RTF electric airplane	79.99
IAC 160m double Bazooka 248' antenna	214.99
IAC 160m double Bazooka Shorty 168' ant	199.99
IAC 160m-S 160m half sloper 127' antenna	139.99
IAC 80m double Bazooka 121' antenna	149.99
IAC 80m double Bazooka Shorty 84' antenna	159.99
IAC 80m-S 80m half sloper 67' antenna	109.99
IAC 40m double Bazooka 64' antenna	124.99
IAC 40m double Bazooka Shorty 40' antenna	119.99
IAC 40m-S 40m half sloper 33' antenna	69.99
ICO BC-119-N21 Nicad/NiMH desk cgr; T81A	89.99
ICO BP-83 7.2v 600mah battery	79.99
ICO BP-84 7.2v 1000mah battery	99.99
ICO BP-157A 7.2v 900mah battery	85.99
ICO BP-174 12v 600mah battery	79.99
ICO BP-200L 9.6v 760mah NiMH batt; T81A	79.99
ICO EX-1759 Infrared receiver	99.99
ICO FL-96 2.8 KHz 455 KHz IIF SSB filter	139.99
ICO HM-90A Wireless microphone	119.99
ICO IC-26XAT/HP 7w 2m HT/batt/cgr/TTP	249.99
ICO IC-M3A 5w VHF marine handheld/AA nicads	149.99
ICO RS-746 Win remote control software	69.99
ICO UT-66 Voice synthesizer; IC-775DSP	69.99
ICO UT-84 Tone squelch unit; 2700H/821H	89.99
ICO UT-86 Tone squelch; IC-706 Mk II only	69.99
ICO UT-89 Tone scan/decode unit; IC-2350H	89.99
KEN DRU-2 Digital recording unit; TS-950SDX	139.99
KEN PB-33 6v 1200mah battery; TH-22ATH	89.99
KEN PB-34 9.6v 600mah 5w batt; TH-22ATH	89.99
KEN SP-950 Ext spkr/audio filters; TS-950SDX	149.99
KEN TC-50/50Case Travel case; TS-50S/60S	89.99
KEN TH-22ATH 5w 2m FM HT/batt/cgr/TTP	199.99
KEN TS-50S Compact HF Xcvr/SW Rcvr/mic/mt	649.99
KEN UT-10 1.2GHz 10w module for TS-790A	499.99
KEN YG-455C-1 500 Hz CW filr; TS-450/690	149.99
KEN YK-107C 500 Hz CW filter; TS-50S	129.99
LDG Z-11 160-10m 1-30w auto ant tuner	149.99
MAL PR-212DNNM 2m/440 6.8.5db 85" NMO	69.99
MEA 07436 #497 Autostar controller; ETX-125EC	99.99
MFJ 493 32K char menu driven menu keyer	129.99
MFJ 498 Dlx CW keyboard/kyr w/disp/keyboard	169.99
MFJ 781 DSP filter for any TNC or controller	69.99
MFJ 9130B 9030 Xcvr/tuner/ps/ant package	229.99
MFJ 9140B 9040 Xcvr/tuner/ps/ant package	249.99

Close-Outs - continued

AES Price

MFJ 9606X 10w 6m FM/data Xcvr/mic/52.525	139.99
MIR C-5022G 220 FM/SSB 50/200w amp/pre	369.99
MIR KP-1/10M 10m in shack preamp	99.99
MIR KP-1/220 220 in shack preamp	99.99
MIR KP-2/10M 10m mast mount preamp	119.99
MIR KP-2/220 220 mast mount preamp	129.99
MIR MP-3 420-450 5/50/150w PEP wattmeter	199.99
MSQ 2M-XP20 144-146 13.3db 10V/10v cross polar	169.99
MSQ 6M-9KHV 6m 50-50.4 12.7db 9el 49' 4" boom	499.99
MSQ 12M-4DX 12m 8.6db 4el 27' bm beam	399.99
MSQ 17M-3DX 17m 6.3db 3el 18' bm beam	399.99
MSQ 17M-5DX 17m 8.6db 5el 36' bm beam	499.99
MSQ 222-XP30 220 15.2db 15h/15v cross polar	169.99
MSQ EB-432 432 Eggbeater antenna	119.99
MSQ FAST MAST 20' extended port alum mast	129.99
NOC NOCC-3 3.1x42 night vision scope/illuminator	139.99
PAC Spirit-2 Std high performance controller	169.99
PLY CS3-75 75' 3" copper strap	109.99
PLY CS3-100 100' 3" copper strap	149.99
PLY IS-IE50LN-C1 50-700 4db 375/125w N bulkhd	89.99
PLY IS-IE50LU-CO 15-400 4db 2w/375/125w bulkhd	89.99
SAN ATS-818 AM/FM/shortwave port Rcvr	169.99
SAN ATS-818CS AM/FM/SW port Rcvr/cassette	199.99
SGC 04-01 SG-2000 150w 1.8-30 MHz Xcvr	1429.99
SGC 04-10 SG-2000 Xcvr w/DSP/PowerTalk head	1649.99
SGC 04-23 SG-2000 Xcvr/DSP/PowerTalk remotd	1879.99
SGC 05-01 SG-2020 Mini 20w PEP Rcvr/Xcvr/mic	599.99
SGC 52-34 RS-232 interface; SG-2000 Xcvr	119.99
SGC 53-04 PS-30 30A/40A peak unreg ps	299.99
SGC 55-05 PS-50 50A/70A peak unreg ps	369.99
SGC 55-04 SG-103 2-28 MHz 90' 15w dipole	199.99
SGC 55-27 SG-303 1.8-30 9' mobile whip & mt	399.99
SGC 55-48 QMS-3 500w antenna system	1899.99
SGC 55-67 Replacement whip for SG-303	249.99
SON AN-1 LW/MW/SW inr/outdoor active rcv ant	99.99
TVG TV Guardian TV/video log language filter	89.99
UNI BC-350A 50 ch prog/service search/AC/PS	89.99
UNI BC-780XL 500 ch scan/trunk/SAME WX	269.99
VIB 180 Std Hand key/VibroKeyer Paddle double	249.99
YAE FEX-736-220 220MHz module; FT-736R	309.99
YAE FNB-58L1 7.2v 1100mah lith ion batt; VX5	65.99
YAE GA-3000 Twr absorber joint; G-1000/2800	119.99
YAE SP-5 External spkr w/audio filter	144.99
YAE TCXO-7 TCXO unit; FT-920	99.99
YAE VX-1R 500mw 2m/440 submini HT/lith ion	129.99
YAE VXA-210 Pilot 5w air handheld w/VOR	299.99
YAE XF-117A 6 KHz AM filter; FT-100D	119.99
YAE XF-117CN 300 Hz CW filter; FT-100D	89.99
YAE YF-116A 6 KHz AM filter; FT-920	119.99
YAE YF-116C 500 Hz CW filter; FT-920	119.99
YAE YSK-8100 Rem separation kit; FT-8100R	69.99

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USED EQUIPMENT

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- Manufacturer's Warranty

Please be aware that there may be instant coupons that apply to Demo equipment which are not reflected in the displayed price. Coupons will be applied to your final total. Ask a salesman for coupon availability. Used Equipment policies do not apply to Demo equipment.

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Equipment Lists
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LOCATION CODES (m) Milwaukee 1-800-558-0411; (c) Cleveland 1-800-321-3594; (f) Orlando 1-800-327-1917; (v) Las Vegas 1-800-634-6227

USED EQUIPMENT

A (+) at the end of the equipment description indicates there are additional options included.

ALINCO	EDC6 CHARGER	9.99m	MC606A DESK MICROPHONE	99.99c	FT840 HF/6M XCVR	464.99m	AOR	AR16B RCVR	179.99mv	CUSHCRAFT	ARX2B 2M VERTICAL ANT	69.99m	HM10-4 MICROPHONE	59.99m	
	EDC88 CHARGER	39.99m	PS40 20A SWITCHING PS	124.99m	FT857 XCVR	549.99c		AR3000A RCVR	989.99mf		ARX6 6M VERTICAL ANT	129.99f	HOP HEADPHONES	89.99v	
AMERITRON			PS52 POWER SUPPLY	189.99f	FT920 HF/6M XCVR	799.99f		AR3000A RCVR/NO ANT	899.99m		A743 40/10 KIT	159.99m	HUSTER	G71504 2M ANTENNA	179.99m
AL80B AMP/3-500Z	1,124.99v		SP950 SPEAKER	119.99m	FT920 XCVR/FM1	819.99mf		AR8200B RCVR	429.99mc		CSMG MAG MOUNT	24.99m		MO1 MAST/NEW/NO BOX	28.99m
AOR			TM451A 440 XCVR	159.99c	FT990 AC HF XCVR	1,129.99f		AR8200MKIIB RCVR	499.99m		PD4 2M POWER DIVIDER	76.99c		MX270 2M/440 MOB ANT	55.99m
AR16B HANDHELD RCVR	99.99m		TS2000 HF/6/2/440	1,399.99f	FT990 AC WCVR FILTER	1,149.99f		TDF370 DSP UNIT	299.99m		X740 40M ADD-ON KIT X7	287.99v		NMO MAG MT "AS-IS"	32.99f
AR3000A DLX RCVR/NO CORD	629.99m		TS50S/YK107C CW FLT	519.99m	FT990 AC XCVR/2FLT	1,169.99m	ARRL							RTM MAG MT CB ANT	14.99v
AR8200 RCVR	299.99m		TS50S XCVR/NO HANDLE	489.99m	FT990 AC XCVR/SCUFFED	1,099.99m	103 2002 HAND BOOK CDROM	9.99f			CN801H SWR METER	134.99m		SSM1 BALL MT & SPRING	42.99c
AR8600 RCVR CELL BLENDED	599.99v		TS750S(G) HF/6M XCVR	859.99m	FT990DC HF XCVR	899.99m	242 OPERATING MANUAL CD	34.99v			CS401N SWITCH/4 POS/N	119.99f		4BT VHF VERT ANT	107.99c
COURIER			TS811A 70CM XCVR	449.99f	FT990DC XCVR/SCUFFED	879.99m	ASTRON				DAVIS			HY-GAIN	
M54 VHF HT 151.625MHZ	79.99m		TS811A 70CM XCVR/SCUFF	429.99m	MD100A8X MICROPHONE	99.99f	RS12A POWER SUPPLY	71.99c			7852 RAIN COLLECTOR	69.99f		AR40 ROTOR	249.99m
DRAKE			TS850S/AT/CW FLT/ROUGH	819.99c	NC34B CHARGER	9.99m	RS35A POWER SUPPLY	134.99m			7400 INDOOR WX STATION	125.99v		HAM IV ROTOR	479.99m
R8B SWL RECEIVER	999.99m		TS870S HF XCVR	1,349.99m	SPA SPEAKER	24.99m	RS4L POWER SUPPLY	44.99v			7852 RAIN COLLECTOR	59.99m		TX2 ROTOR	559.99m
GRUNDIG			TS940S/AT HF XCVR	899.99m	DEMO EQUIPMENT								ICOM		
SATELLITE 800 SW RCVR	359.99m		TS940S/AT A/B BUTTON WORK	874.99m	ADI									AD51 CHARGE ADAPTER	9.99mv
HAL			TS950SDX/2 FLT/DRO2	2,449.99c	AT201HP 2M HT	89.99m								AD56 CHARGE ADAPTER	12.99v
DXP38 HF MODEM	294.99f		MFJ		AT401HP UHF HT	143.99c								AD81 CHARGE ADAPTER	12.99f
HEIL			212 TUNE-UP HELPER	59.99f	ALINCO									AD87 CHARGE ADAPTER	7.99m
HCLIC MIC/COM	184.99f		407C ELECT KEYS	59.99f	DJ10T RECEIVER	278.99f								AG25 2M RX PREAMP	143.99f
ICOM			4628 MULTI-READER	135.99f	DJX2T RECEIVER	179.99mf	BENCHER							AH2B HANDPHONE/NO WHIP	159.99m
AD56 BATTERY ADAPTER	9.99c		492 MEMORY KEYS	69.99f	DJ496T UHF HT	134.99mf	BY1 PADDLE/BLACK	98.99c						BC119(11) DESK CHARGER	62.99c
AH2A AUTO ANT TUNER	149.99mc		493 MEMORY KEYS	103.99f	DJ596T 2M/440 HT	189.99m	BY3 PADDLE/CHROME	249.99m						BC119G1) NICAD DESK CHGR	89.99c
AT150 AUTO ANT TUNER	289.99mf		941E ANTENNA TUNER	79.99m	DR135T 2M XCVR	134.99m	BMI							BC119N1) DESK CHGR	79.99v
HM95 HAND MIC/NO CONNECTOR	14.99v		MIDLAND		DR605TQ 2M/440 XCVR	305.99c	972A WALL CLOCK "NEW"	14.99f						BC127A CHARGER	18.99m
IC707 HF XCVR	399.99m		75510 FRS XCVR	49.99f	DR620T 2M/440 XCVR	299.99m	BOUNTY HUNTER							BC135 CHARGER	69.99m
IC718/UT106/CR338	539.99m		NGC		DX77T HF XCVR	599.99f	FASTRACKER METAL DET	89.99m						BC144(01) CHARGER	50.99c
IC728 HF XCVR/FL100	499.99m		MH900PK EAR/MIC	29.99c	EBP1GN BATTERY	29.99v	LANDRANGER METAL DET	404.99v						BC157 BATTERY	59.99c
IC729 HF/6M XCVR/FM	699.99c		SANGEAN		EBP35N BATTERY	69.99c	BUSHNELL							BP173 BATTERY	89.99mc
IC730 HF XCVR	399.99c		ATS909 SW RCVR	199.99f	EBP36N BATTERY	61.99v	780103 ERECTING PRISM	44.99c						BP198 BATTERY	49.99m
IC735 HF XCVR	499.99mf		SGC		EDC34 FAST CHARGER	69.99m	782010 TELESCOPE	179.99m						BP209 BATTERY	44.99m
IC735 HF XCVR/FL32A	509.99c		0411 REM HEAD/20/CBL	471.99f	EDC60 FAST CHARGER	71.99v	BUTTERNUT							BP211 BATTERY	79.99mc
IC735 HF XCVR/FL63	509.99m		5304 PS30 UNREG PS	319.99c	EDC63 ADAPTER	14.99m	CPK1 COUNTERPOISE	116.99c						BP5 5W BATTERY	71.99f
IC735/NO DOOR/SCRATCH/STAIN	479.99c		5417 SG231 TUNER	423.99f	EDC88 CHARGER	54.99m	CELESTRON							CP13 CIG ADAPTER	34.99m
IC746PRO/SM SCRATCH	1,079.99f		SHURE		EDS9 SEPARATION KIT	59.99m	11031 NEXSTAR 5 TELESC	899.99f						CP314 GPS ADAPTER	34.99m
IC746PRO HF/6/2 XCVR	1,099.99mf		526T SERIES II MIC	89.99f	EM13 HEADSET	63.99m	31142 NESTAR 114GT TEL	399.99m						CP17 LIG ADAPTER	19.99mf
IC756 HF/6M XCVR	1,199.99m		SONY		EMS14 MICROPHONE	99.99m	CENTAUR							CSWH4 SOFTWARE/CABLE	44.99m
IC756 HF/6M/UT102+	1,239.99m		ICFSW7600GR SWL RCVR	139.99f	EMSA4 SPEAKER/MIC	29.99c	B4Y1050 BALUN	53.99f						CSW10 SOFTWARE	40.99c
IC756PRO HF/6M XCVR	1,399.99f		UNIDEN		EMSS1 HEADSET	34.99m	CHANNEL MASTER							HM118TN DTMF HAND MIC	53.99c
IC761 HF XCVR	669.99f		HH985 MARINE HT	99.99m	ESC18 CASE	9.99m	9515A ANT. ROTATOR/KNOB	99.99m						HM12 HAND MICROPHONE	67.99v
IC765 HF XCVR	999.99f		VECTRONICS		ALPHA DELTA		COAXIAL DYNAMICS							HM46 SPEAKER/ MIC	40.99cf
IC765/UT36/SCUFFED	999.99m		CK200 KEYS	47.99c	DELTAACN 4POS "N" SWITCH	134.99v	82007 ELEMENT	59.99m						HM54 HD SPEAKER/MIC	75.99c
YAESU			YAESU		PATHFINDER ANT TUNER	359.99m	COBRA							HM77A MICROPHONE	109.99v
IC910H 2M/440 100/75W	899.99m		CSC29 SOFT CASE	14.99c	PATHMINDER COAX SWITCH	134.99m	HH37ST WALKIE-TALKIE	54.99m						HM92A MICROPHONE	89.99m
MT10 MARINE SSB XCVR	999.99f		CSC62 SOFT CASE	.99c	AMECO		PR3000-2 GMR5/FRS PAIR	71.99m						HS10SA HEADSET	59.99m
PS125 POWER SUPPLY	199.99f		FBA3 CHARGING SLEEVE	19.99c	HP300T HIGH PASS FILTER	8.99v	25LTD CLASSIC CB XCVR	79.99c						HS85 HEADSET	79.99m
PS15 POWER SUPPLY	119.99m		FC10 AUTO TUNER	269.99f	HP715 HIGH PASS FILTER	8.99v	COMMUNICATIONS SPECIALISTS							ICQ7ABC 2M/440 HT	109.99m
PS55 POWER SUPPLY	129.99c		FC20 TUNER	189.99c	107P2C CODE SOFTWARE	24.99mf	ID8 ID BOARD	64.99m						IC27HSPORT HT	89.99m
PW1 1KW HF AMP	3,599.99m		FC30 AUTO-TUNER/FT897	189.99mf	AMERITRON		COMET							BM105 BM/MIC/HDST/HC5	79.99cf
R7000 RCVR/MB430	919.99c		FT7000 HF AMP/10M	1,679.99m	AR800H HF AMPLIFIER	679.99f	CK5N "N" MOUNT	39.99m						BM55 MIC/HDST/HC5	62.99v
R7000/CR12 REMOTE	919.99m		FN878 BATTERY/FT897	84.99f	AR181H AMPLIFIER	679.99f	CP5M HD UHF MOUNT	59.99f						CC11 ICOM MIC MOUNT	27.99c
R7000 2S-2000MHz RCVR	899.99mf		FT1030A POWER SUPPLY	199.99m	ARB702Y AMP RELAY	34.99m	CP5NM NMO MT/16.5/CBL	59.99m						CC1K KENWOOD MIC CABLE	27.99v
R75 RCVR/UT106 DSP	429.99mf		FT1000 HF XCVR	2,174.99m	AWM30 SWR METER	124.99m	CP5N84 MOUNT	59.99m							
R75 SWL RECEIVER2	429.99m		FT1000D HF XCVR	2,699.99mf	AMERITRON		GR5M TNP LNK W/COAX	60.99m							
R8500 RCVR/UT102+	1,249.99m														

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A current list is available at www.aesham.com or Call Toll Free

DEMO CONTINUED

ICOM			
ICV8000 75W 2M XCVR	170.99f		
ICW32A 2M/440 HT	229.99f		
IC2GXA1 2M 3W HT	189.99c		
IC207H 2M/440 XCVR	251.99f		
IC2100H25N XCVR	149.99m		
IC703 XCVR	599.99m		
IC706MKIIG XCVR	693.99c		
IC718 XCVR	499.99m		
IC746PRO HF XCVR	1,466.99m		
LCF21L CASE	34.99v		
LC128 CASE	34.99mv		
LC137 CASE	34.99c		
LC148 CASE	22.99c		
MB62 BRACKET	23.99m		
MB65 BRACKET	29.99m		
MB85 MOUNT	19.99m		
OPC184 POWER CORD	24.99m		
OPC587 16 FT SEP CABLE	71.99c		
OPC598 CABLE/AT180	65.99v		
PCR1000(02)BON RCVR	339.99m		
PS125 POWER SUPPLY	269.99m		
PS85 POWER SUPPLY	239.99m		
RMK706 REMOTE SEP KIT	63.99c		
R10(05) RCVR	269.99m		
R10(05) RCVR	269.99m		
R3(26) RCVR	299.99mf		
R5(06) RCVR	179.99mv		
R8500(02) RCVR	1,349.99f		
SM20 DESK MIC	179.99f		
SP13 EARPPHONE	3.99v		
SP7 SMALL EXT SPEAKER	85.99v		
IDIDM PRESS			
HK-3 1DI HOOK UP KIT	9.99v		
K3 LOGKEY CW KEYS	116.99v		
INTERNATIONAL ANTENNA			
160M HALF-SLOPER	124.99m		
KENWOOD			
KAM98 TNC	359.99v		
KENWOOD			
AT50 ANTENNA TUNER	296.99v		
HMC3 VOX/BOOM MIC	53.99c		
KSC8 CHARGER (220V)	19.99f		
MC520M MIC	71.99m		
MC580M MIC	71.99v		
MC60A DESK MIC	134.99v		
PB33 BATTERY	80.99v		
PG36 CIG CORD	8.99m		
PS40 POWER SUPPLY	134.99m		
SP23 SPEAKER	79.99v		
THF6A 2M/70cm/220HT	296.99f		
THG71A 5W 2M/440 HT	206.99f		
TH22ATH 2M HT	179.99c		
TMJ700A XTRA HEAD BCKT	9.99v		
TM261A 2M MOB	134.99f		
TS480SAT 100W HF XCVR	1,232.99v		
TS50S HF XCVR	584.99c		
TS870S HF XCVR	1,799.99m		
TS870S W/ S02 HF	1,899.99f		
UBZLH14BK FRS HT	62.99f		
LACROSSE			
WS7038UF WIRELESS RAIN	53.99v		
WS8015N THERMOMETER	139.99mv		
LARSSEN			
KG144UPL 2M GLASS MT	69.99c		
NMOQSPC 136-512 1/4 ANT	12.59v		
NMO1PT TRUNK LIP MOUNT	26.99v		
NMO150TLN 2M ANT/TRNK MT49.99v			
NMO440C UHF ANT	24.99m		
LOG			
AC1 CONTROL INTERFACE	7.99c		
AT11MP HF AUTO TUNER	199.99m		
ICOMIC2 8" CABLE	7.99c		
RT11 REMOTE TUNER	179.99m		
Z100 AUTOTUNER	134.99c		
LIGHTWAVE			
LWHT HEADBAND LIGHT	35.99v		
LM3000 FLASHLIGHT	44.99v		
MAGELLAN			
MERIDIANXL GPS	149.99m		
MAHA			
MHA102 2M 35W AMP	62.99c		
MHC777 CHARGER	44.99cf		
MALDOL			
MK30H MOTRZD TNK MNT	93.99v		
MAXON			
FRS114 FRS HT	44.99c		
GMRS21X GMRS/FRS HT	89.99c		
MX49FX 49 MHZ XCV	19.99mc		
PCS50 40MHZ HT	19.99c		
MFJ			
1040B RCVR PRESELECTOR	89.99v		
1118 DLX DC PWR STRIP	67.99c		
116DC CLOCK	8.99f		
118 2V4/2 CLOCK	22.99c		
1214PC INTERFACE	124.99mc		
1224 INTERFACE	89.99m		
1272M TNC/MIC SWITCH	35.99f		
1272MY TNC/MIC SW	35.99v		
1272MZ TNC/MIC SWITCH	25.99f		
1275 SOUND CARD INTFRF	89.99f		
1279M SNDRD INTERFACE	115.99v		
128 CLOCK	49.99m		
1284W WIN SOFTWARE	26.99f		
1285 IBM SOFTWARE	14.99m		
1289 5-14" IBM MULTICOM	9.99f		
1289M 3 1/2 IBM	53.99cv		
1622 40 2M ANTENNA	79.99v		
1700B SWITCH	69.99m		
1910 33" TELESCOPIC MAST	71.99v		
203 DIP METER MISSING COIL	34.99m		
297 DESK MICROPHONE	62.99c		
4114 POWERPACK	59.99m		
422D KEYS/PADDLE	139.99m		
4245MV POWER SUPPLY	169.99f		
44 SCOPE TUNE	13.99c		
45B 128K RAM IC	4.99f		
452 CW KEYBOARD UNIT	119.99m		
462B MULTI-RCVR	149.99m		
490 PADDLE/KEYER	169.99mv		
493 MEMORY KEYS	99.99f		
498X KEYS	134.99m		
5022X HT TO PK232 CABLE	12.99m		
5063 TNC CABLE ICO	17.99c		
5084 TNC/ICO 8PIN	13.99mc		
5084MY KANVICO MOD CBL	13.99c		
5086 TNC-KENVALI 8-PIN CBL	12.99v		
5086YH KAM HF KEN 8PIN	12.99v		
5383Y YAE INTERFACE CBL	35.99v		
5397MY YAE MOD CABLE	14.39c		
5397Y YAE 8-PIN CABLE	14.39c		
64113 CHARGER	44.99m		
641K CHARGER	44.99cv		
704 LOW PASS FILTER	44.99m		
8121 2M DATA RADIO	34.99m		
924 440MHZ ANTUNTER	62.99v		
931 ARTIFICIAL GROUND	79.99m		
9406X 6M SSB XCVR	224.99mc		
9420X 20M SSB XCVR	199.99m		
948 ANTENNA TUNER	107.99v		
989C DLX 1.2KW PEP TUNER	287.99f		
MGE			
HFS1 SPEAKER	7.99mc		
MIDLAND			
WR300 WX RADIO	44.99mv		
75510 FRS RADIO	29.99c		
MIRAGE			
B215G 150W 2M AMP	239.99mf		
B23G 2M 2/30W AMP	119.99v		
B2516G AMP	239.99m		
B310G 2M AMP/PREAMP	161.99f		
B34 2M FM 2/30W AMP	62.99v		
B510G HT/100W 2M AMP	188.99m		
C211G 220 AMP/PRE	299.99v		
C22G 220 AMP/PREAMP	139.99f		
C2512G 220 AMP/PREAMP	278.99f		
D26N UHF AMP	234.99m		
KP1/10M PREAMP	114.99m		
KP1/220 PREAMP	89.99m		
KP1/6M GM PREAMP	99.99f		
M1 160-10M 2KW METER	197.99f		
M2			
16" x 1/2" MAST	11.99v		
2M5440XP DUAL BAND YAGI	179.99c		
OREGON SCIENTIFIC			
RM116E EXACTISE	26.99f		
WR195T WX RAD	62.99v		
PALOMAR			
SMARTBRIDGE SOFTWARE	4.99v		
PALSTAR			
AT1500BAL TUNER	625.99v		
POUCH			
POUCH P5 POUCH	13.50v		
RANGER			
RCI29500X 10/12M XCVR	239.99m		
RMS			
CN220 HF-220 METER	89.99c		
SANGHAN			
AT540A RCVR	69.99m		
AT550S AM/FM/SW RCVR	116.99c		
AT5818 SWL RCVR	152.99v		
AT5818ACS SWL RCVR/TAPE	199.99mc		
AT5818CS/TAPE BROKEN	149.99m		
AT5909 SWL RCVR	224.99m		
SDC			
0401 SG2000 HF XCVR	1,289.99v		
5296 SG500 HF AMP	1,124.99v		
5304 PS30 POWER SUPPLY	289.99m		
5417 SG-231 SMARTTUNER	476.99cv		
5547 QMS-2 SYSTEM	799.99m		
7007 POWER CLEAR DSP	249.99m		
SHAKESPEARE			
495 MARINE ANT MOUNT	15.99v		
SHURE			
526T SERIES III AMP DESK MIC	111.99v		
SMILEY			
270A 2M/440 TELES WHIP	17.99v		
5/8SLD2 2M DUCK ANT	15.99v		
SONY			
AN102 INDOOR ACTIVE ANT	69.99m		
ICFSW07 SWL RCVR	359.99mf		
ICFSW30 SWL RCVR	69.99c		
ICFSW7600GR SWL RCVR	143.99v		
ICFSW77 SWL RCVR	419.99m		
TERK			
AF925 AM/FM LOOP ANT	34.99m		
LF20 AUDIO/VIDEO EXTENDER	79.99m		
TV42 AMPL TV ANTENNA	49.99m		
TV50 AMPLIFIED TV ANT	71.99v		
VR1 TV VOLUME REGULATOR	44.99m		
TIMEWAVE			
ANC4 NOISE CANCELLER	179.99v		
WEFAX256 PROG	116.99v		
UNIDEN			
BC17 SCANNER	149.99mf		
BC147XL SCANNER	80.99c		
BC244CLT SCANNER	89.99c		
BC780XL SCANNER	215.99f		
BC895XL SCANNER	179.99v		
PRO538W CB XCVR	54.99m		
SC150 SCANNER	143.99c		
WX500 WX RADIO/SAME	35.99f		
VALOR			
PHF6 6M ANT	19.99m		
VANCO			
370052 DIG MULTIMETER	17.99c		
SWR1 SWR METER	17.99m		
VECTRONICS			
HT1500 ANTENNA TUNER	359.99mf		
HPF1 HIGH-PASS FILTER	14.99m		
LP30 1500W LOW PASS F	62.99v		
VIBROPLEX			
155 STRAIGHT KEY	134.99m		
WILSON			
FGT3/BLK 3" CB WHIP	23.99c		
TRUCKER 2000 CB ANT	49.99m		
WART			
OT897 TUNE CONTROL	58.99cv		
W5YI			
GW05 CODE TAPES	26.99m		
X-10			
SP554A MOTION DETECTOR	26.99v		
YAESU			
ADMS2G SFTWRE FT7100	34.99cv		
AD3 DUPLEXER	47.99v		
ATAS100 ANTENNA	224.99cf		
ATAS120 MOT ANTENNA	269.99v		
CA10 CHARGE ADAPTER	11.99v		
CD15 CHARGE STAND	19.99mc		
CSCV10 CASE	24.99v		
CSC69 FOR FNB40	13.99m		
CSC88 CASE	12.99m		
CT26 CABLE	19.99m		
CT35 CLONE CABLE	7.99v		
EDC12 CIG ADAPT	24.99m		
EDC15 CIG LTR CABLE	26.99c		
FBA15 BATTERY	14.99m		
FH1 KEYPAD	79.99m		
FIF232C INTERFACE	84.99m		
FNB41 BATTERY	52.99c		
FNB78 BATTERY; FT897	89.99f		
FNB79 BATTERY; VR1200	7.99c		
FI1030A 25A PS W/MTRS	224.99mf		
FRG100B RCVR	494.99v		
FT100D HF/6M/2M/70CM	719.99mcv		
FT1000MPMKV 200W HF	1,844.99f		
FT2800M 2M XCVR	143.99f		
FT50RD/418 2M/440 HT	197.99c		
FT817 XCVR/SCRATCH	509.99v		
FT840 HF XCVR	519.99f		
FT847 HF/6M/2M/70cm	1,419.99m		
FT8800R 2M/440 XCVR	329.99m		
FT8900 CIRCUIT DIAGRAM	2.99v		
FT897 HF/6M/2M/70cm	809.99f		
FT920 XCVR/FM1	999.99cf		
G550 ELEVATION ROTOR	279.00c		
HRI100 WIRES UNIT	134.99m		
MD200A8X DLX DESK MIC	341.99cf		
MEK2 MIC EXTENDER	19.99m		
MH30A2B SPKR/MIC	24.99m		
MH30C2B SPKR MIC	41.99c		
MH32A2B SPK/MIC	22.99m		
MH34B4B SPKR MIC	27.99c		
MH36C8J MICROPHONE	54.99m		
MH37A4B SPKR/MIC	24.99m		
PA30B AC ADAPTER	6.99c		
VR120 RECEIVER	152.99mcv		
VR120D COMM RCVR	170.99mcv		
VR500 AM/FM/SSB HT	269.99mf		
VX1R 2M/70cm HT	119.99f		
VX2R 1.5W 2/440 HT	161.99c		
VX5R 6M/2M/70cm HT	206.99f		
VX5RS silver 6M/2M/70cm	1,206.99f		
VX7BR 6M/2M/70cm HT	287.99f		
YA007FG ANTENNA	79.99m		
YF112C CW FILTER	107.99v		
YH1 HEADPHONES	34.99m		
51RCLONE CLONING CABLE	7.99v		

TRADE & UPGRADE

We need your clean
SSB & FM Gear!

Call for our Quote

Sorry, no Handhelds



A portion of the Used/Demo inventory in Milwaukee

Please use these lists as a Guide

These Used and Demo Equipment lists are compiled from an actual inventory as of 3/16/2004. However, due to turnover from daily selling and trading, the actual items listed may or not be available.

All of our stores are linked on-line which allows real time access to our ever changing inventory. For your needs, you may call any of our locations to check for availability or to discuss an alternative with one of our salespersons.

The Used and Demo Equipment lists are also available on our web site and are updated regularly (www.aesham.com). Check it Out!



ATS-404 Full Performance, Full Featured Digital, AM/FM Stereo Shortwave Receiver Continuous coverage (continuously tunes all shortwave bands and any frequency in between). AM reception with 9k/10k switch, FM plus stereo with earphones. Keypad entry and auto and manual search buttons, 45 memory presets, auto memory scan. Illuminated LCD display, tone control, lock-switch. Dual time (12/24 hour) clock and adjustable sleep timer with new Human Wake System. Carrying case and stereo earbuds included. Uses four "AA" batteries. 6.5" w x 4" h x 1.25" d... **\$79.99**



ATS-505 Professional Digital Multiband Receiver AM/FM stereo/shortwave and SSB reception • Continuous coverage (tunes all shortwave bands and any frequency in between) • Auto memory scan (45 presets, plays each in sequence) • Auto preset system, determines all memory presets based on signal strength of station • Fine tuning • 9/10kHz switch • Lockswitch • Tone control • Local/DX switch • Dual time clock, adjustable sleep timer and Human Wake System with repeating beep tone (volume increases every 15 sec.). Includes carrying case and earphones..... **\$129.99**



ATS-818CS (left) World Band Receiver with Programmable Cassette Recorder 16 bands, continuous coverage 50kHz to 30MHz. AM/SSB/CW/FM modes; stereo via headphones, 45 memory presets. Tuning methods: Direct input, auto or manual scan, memory recall, rotary dial. AM wide or narrow filter, tone and RF gain controls, signal strength and battery indicator. Programmable cassette recorder, play and record LED indicator, auto-stop feature. Clock with dual time display, alarm and sleep timer. Uses seven "AA" batteries (not included). Includes AC adapter and external antenna adapter. 11.5" w x 7.75" h x 2.75" d, 5 lbs **Closeout \$199.99**

ATS-818 (right) World Band Receiver All features above, w/out cassette recorder.. **Closeout \$169.99**



ATS-606A Compact Digital All-Band World Receiver (left) Continuous all-band coverage 153 kHz-30MHz. AM/FM (FM stereo with earphones). 54 memories, manual or keypad tuning, 1kHz/step fine tuning, scanning, LCD display. Dual time clock and sleep timer. 5.75" w x 3.5" h x 1.25" d. **\$139.99**

ATS-909 FM-Stereo/MW/LW/SW PLL Synthesized Receiver (right) Five tuning methods: Direct frequency, Autotune, Manual, Memory recall and Rotary, 307 memories. Stereo via earphones, SSB reception. MW 9k/10k switch. AM wide/narrow filter and FM mono/stereo selector. Dual time with three timers and sleep timer. Clock feature displays 42 city times. RF gain/tone controls. Lock switch, recorder output jacks, battery and signal strength indicator. Uses 4 AA batteries or 6V DC; AC adapter incl. 8.5" w x 5.375" h x 1.375" d, 1.9 lbs... **\$249.99**

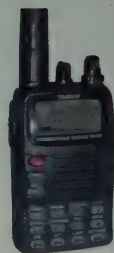


PT-50 ProTravel (left) Ultra compact, travel radio with world times • AM/FM stereo and continuous shortwave coverage 1.7-29.999kHz • Rotary world time zone dial LCD with backlight • Built-in 12/24 hour clock • Wake up to radio or buzzer • Adjustable sleep timer • Soft, hand-crafted leather case • 5" w x 3" h x 1" d, 10 oz **\$79.99**

PT-80 ProTravel (right) Ultra-compact digital travel radio • AM/FM stereo and shortwave coverage 1.711-29.999kHz • SSB with shortwave dual conversion • Five tuning methods: direct frequency access, auto scan, manual, memory recall, and rotary • Auto tuning system with 45 presets • 1kHz step fine tune on SW bands, 50kHz fine tune on FM • Clock with 12/24 dual time, radio or buzzer wake-up and adjustable sleep timer • Soft, handcrafted leather pouch • AC adapter and shortwave antenna included • 7" w x 4" h x 1" d, 1 lb. 2 oz **\$159.99**

ANT-60 Portable, wind-up, shortwave antenna for use with most shortwave radios **\$13.99**

DT-200V Broadcast and TV Band Receiver Fits in shirt pocket or clips to belt. Covers AM and FM broadcast bands (FM stereo via headphone), plus the audio portion of TV channels 2 to 13. LCD display, up and down tuning buttons, auto-scan, 19 memories, automatic shut-off, built-in speaker. Belt clip and stereo earphones included. Uses two "AA" batteries. 4.375" x 2.625" w x .75" d, 5 oz **\$69.99**



VR-500 High Performance Mini Receiver General coverage 100kHz-1300MHz (cell blocked) • CW, SSB, LSB and USB, AM and FM wide/narrow modes • Includes AM/FM broadcast, HF shortwave up to 16MHz, VHF/UHF TV bands, VHF AM aircraft band, and a wide range of commercial/public safety frequencies • Keypad entry • 1000 memory channels • 100 "skip" memories • 10 search memories • 100 dual watch memories • Priority • Powered by 2 "AA" alkalines or 9-16V DC • 2.2" w x 4.2" h x 1" d, 7 oz..... **\$299.99**



FRG-100B High Performance Communications Receiver Covers 50kHz-30MHz → CW, SSB, AM modes; FM optional. 50 tunable memory channels and two band edge memories. Multi-function scanning. Adjustable SSB carrier offset, selectable AGC rate, noise blanker, all mode squelch, RF attenuator, twin 12 and 24 hour programmable clocks with on/off timer and sleep-timer, CAT system for PC control. Bright backlit LCD readout with adjustable control. 120/240 VAC or 12-14VDC @ 1.2A 9.375" w x 3.5" h x 9.5" d, 6.6 lbs (See Price Guide for optional filters and high-stability oscillator)..... **\$599.99**



VR-5000 Multimode Scanning Receiver Continuous frequency coverage from 100kHz to 2.6GHz (cellular blocked) • Direct keypad frequency entry and a wide variety of scanning capability • 2000 memory channels, 100 memory banks with alphanumeric labels • Dual receive • Bandscope graphical activity monitor • "Smart Search" automatic memory loading feature • World clock with time zone map • 13.5VDC @ 0.7A • 7.1" w x 2.75" h x 8.0" d, 4.2 lbs..... **\$599.99**



VR-120D Mini Communications Receiver Provides general coverage receive from 100kHz-1299.995MHz (cell blocked) on AM/FM wide and narrow modes; includes AM and FM broadcast, HF shortwave, VHF/UHF TV, VHF AM aircraft band, and a wide range of commercial and public safety frequencies. • Rugged outdoor-ready case • Ultra-long battery life • BNC antenna connector • 4-button operation • Easy access, wide-band coverage • Special "preset mode" aids in quick tuning • Super simple one-touch memories • Versatile 640 channel memory system • Option for AC or DC power with optional adapter/cable • Wide selection of scanning modes • 3.3" h x 2.3" w x 1" d, 6.9 oz..... **\$199.99**

SONY

WORLD BAND RADIOS

ICF-SW07 PLL synthesized • FM 76-108 MHz, SW 1621kHz-29,999 MHz, MW 530-1620kHz, LW 150-529 kHz • FM stereo at headphone jack • SSB/CW, AM synchronous detection • SW station call, my-memory tuning plus 4 other tuning methods: direct manual, scan or preset • 3000 frequency memories • One-push access to 8 major stations (BBC/VOA/DW, etc.) • Editable station labels • 24-city name/time display • Built-in timer • Clock with sleep timer and alarm • Requires 3 VDC or 2 "AA" batteries • Includes external active antenna module, AC adapter, stereo earphones, leather case • 5.3" w x 1.2" d x 3.6" d, 9.1 oz. **\$399.99**



ICF-SW11 Compact • 12 bands including FM stereo, MW, LW and SW bands 1-9 • Easy analog tuning with LED indicator • FM stereo headphone jack for private listening in noisy environments • DC in-jack for optional AC adapter • 6.5" w x 3.75" h x 1.3" d **\$49.99**

ICF-SW12 11 bands, including FM, AM and SW bands 1-9 • Designed for travel - compact size with protective lid • World time clock and universal time coordinator to calculate time in cities worldwide • Backlit LCD display • LED tuning indicator for precise center-frequency indication and accurate tuning • Built-in alarm with convenient snooze button • Requires 2 "AA" cells • 4.3" w x 3.1" h x 1.2" d **\$89.99**



ICF-SW35 PLL synthesized, dual Conversion super heterodyne • Range: AM (530-1710 kHz), FM (76-108MHz) • FM stereo at headphone jack • Shortwave from 2250kHz-26.1MHz • UP/DOWN tuning buttons 1kHz/5kHz tuning steps in shortwave • 50 memory presets (5 banks of 10 presets each) • 1 or 5 kHz step tuning on SW • Memory scan • Built-in digital clock with two wake times and 60-minute sleep timer • Dial illumination button, lock switch, attenuator • 2.5" speaker plus earphone jack • Includes cloth protector and SW guide • Requires 3V DC or two "AA" cells • 6.7" w x 4.5" h x 1.4" d, 16 oz **\$89.99**

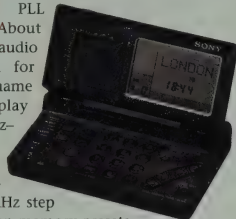


ICF-SW40 PLL synthesized • Analog/digital tuning • 14 bands • Range: LW/AM/SW (3850kHz-26.1MHz) and 76-108MHz FM (FM stereo-to-headphone jack) • 20 station memory presets • 1kHz step tuning • Built-in clock with dual standby function • 6.75" w x 4.25" h x 1.6" d, 15 oz. **\$119.99**



ICF-SW77 PLL synthesized • Electronic rotary tuning • Preset, 10-key direct, manual and scan tuning • 150kHz-30MHz and 76-108MHz (FM stereo-to-headphone jack) • 50Hz tuning steps • Clock display • 5-event programmable timer • Sleep timer • 162 memory presets with station name tuning • SSB/CW and AM synchronous detection • Backlit LCD display • World time scale • Large, 5" x 3" speaker • Requires four "C" cells • Includes 120V adapter, earphones, belt and wind-up antenna • 10.8" w x 6.8" h x 1.8" d, 3.3 lbs. **\$469.99**

ICF-SW100S PLL synthesized • About the size of an audio cassette - ideal for travel • 24 city name and time display • Range: 150kHz-30MHz and 76-108MHz FM (stereo-to-headphone jack) • 1kHz step tuning • 50 station memory presets • Editable station labels • Auto scan, manual and 10-key direct access tuning • Built-in clock with sleep timer and dual standby • Includes stereo headphones, 120 VAC adapter, active antenna and soft carrying case • Requires 3V DC or two "AA" cells • 4.3" w x 0.9" h x 2.8" d, 8 oz. **\$349.99**



ICF-SW1000T PLL synthesized • 1 kHz step tuning • 130kHz-30MHz and 76-108MHz FM (stereo to headphone jack) • Built-in stereo cassette recorder with auto-reverse and timer record • SSB and synchronous AM detection • 32 memory presets • Built-in clock with alarm, dual standby and sleep timer • Requires 3VDC or 3 "AA" cells • Includes vinyl case, stereo earphones, hand strap and wind-up antenna • 7" w x 4.25" w x 1.6" d, 1 lb. **\$399.99**



ICF-SW7600GR PLL synthesized • Manual and auto scan 1kHz step tuning • 10-key direct access tuning • 150kHz-30 MHz and 76-108 MHz FM • Dual conversion super-het • SSB/CW and AM synchronous detection • Multi-function LCD digital readout • Dial light and LED tune indicator • Built-in clock with sleep timer and dual standby functions • Record output jack • 9/10kHz MW tuning switch • External antenna jack • Large 3" speaker • Requires 6V DC or 4 "AA" cells • Hold button preventing accidental changes to presets • 100 station memory presets • World time/dual clocks • Includes vinyl case, wind-up antenna and handbook • 7.6" w x 4.75" h x 1.3" d, 1 lb., 5.5 oz. **\$159.99**



AN-LP1 Active Antenna Enhances sensitivity for clearer reception of even weak signals. • Light weight • Provides high sensitivity and noise reduction • Active antenna controller with rotary tuning • 19" loop that folds to 7" for portability • Easy to mount • Includes soft carrying case. **\$89.99**



AN-1 Outdoor/Indoor Active Antenna Improves LW/MW/SW reception from 150kHz to 30MHz. A low noise and interference reducing FET amplifier module, with a 59 inch telescopic whip, mounts outdoors or inside a window or attic. Includes a 39-foot coaxial cable which connects to a control box at the receiving position. An output lead with two alligator clips, or mini-plug, connects to the radio's antenna input. Uses 6 AAs or 9V AC adapter (neither are supplied). **Closeout \$99.99**



AN-102 Indoor Active Antenna Three ways to use! For SW, a coupler cord from the antenna controller plugs into to radio's external antenna jack, or a special coupler cord from the controller clips onto radio's external antenna. For LW/MW, radio is positioned next to controller, coupling without a direct connection. Includes antenna module with 45" whip antenna, antenna controller box and two coupler cables. Uses 4 AA cells (not included). **\$79.99**

ICOM

PCR-1000-02 BON. PC Communications Receiver Connect the 1000-02 to a lap/desktop IBM-compatible for reception of a wide range of frequencies. NOW includes the Bonito software! Listen to favorite stations in the background while running other applications. 100% PC hardware external. Includes everything needed to connect to a PC: power supply, speaker, antenna and cable • 0.01-823.999MHz, 849.000001 to 868.999MHz, and 894.000001 to 1300MHz (cell blocked, guaranteed specifications 0.5-1300MHz, only) • WFM, FM, AM, SSB, CW • 1000 memories per file • Requires Windows® OS, 10MB free space, 16MB RAM, FD drive, RS-232C (38400+ bps) serial interface, 640 x 480 display..... **\$374.99**



R-75 HF + 50MHz Receiver Covers a wide frequency range from 0.03-60MHz and includes 101 memory channels. All mode - USB, LSB, CW, RTTY, AM, S-AM and FM. Alphanumeric readout with digital bar S-meter. Conventional tuning plus numeric key pad for direct input. Features include high stability receiver circuit, superior dynamic range, 2-level preamp, noise blanker, synchronous AM detection, twin PBT capability, front mounted speaker, filter options and UT-106 DSP. Operates from 13.8V DC @ 1.1A, or supplied AC adaptor. 9.5" w x 3.75" h x 9"d, 6.6 lbs..... **\$529.99**



R-8500-02 Wide-band All-mode Receiver 0.1-2000MHz (cell blocked) with 10Hz resolution. All modes: AM, FM, WFM, SSB, CW. Direct keyboard entry. Versatile scan functions; 1000 tunable multi-function memories; 20 banks of 40 channels plus auto-write and skip areas. 20 scan edge memory channels store 10 sets of frequencies for programmed scan, plus priority. Selectable AGC, noise blanker, tone, squelch, record jay. Selectivity: 500 Hz, 2.3, 6 and 15kHz. RS-232C interface. Voice synthesized readout optional. 110/220V AC. 11.875" w x 4.875" h x 10.875" d, 16.5 lbs..... **\$1499.99**

Look For This

NEW

& Check Out AES' Latest Additions.

AOR

AR-8200 MK III-B All-Mode Wide-Band Modular Handheld Receiver Improved! Wider coverage, a new TCXO for greater stability, improved sensitivity and intermod, enhanced S/N and better audio. • 100kHz-3GHz (cell blocked) • FM-w, FM-n, super narrow AM, AM-w, AM-n, USB, LSB, CW modes • 1000 memories (20 banks x 50 channels, 40 search) • Two VFO, twin frequency readout • Alphanumeric display • Telescopic antenna, detachable MW bar antenna • Band scope with save trace facility • Bar signal meter • Step-adjust, frequency offset, AFC • Optional memory expansion, CTCSS squelch/search, tone eliminator, 20 second record/playback and voice inverter • Noise limiter • Attenuator • Computer control and programming capability • Includes NiMH cells (charge while operating) • 2.4" w 5.7" h x 1.0" d, 0.75 lbs..... **\$569.99**



AR-3000AB All-Mode High Performance Professional Monitor 100kHz-2036MHz (cell blocked) • 400 memory channels • FM-w, FM-n, AM, USB, LSB, CW • Tri-conversion IF stage • Scans 50 channels per second rate • RS-232C port for computer control • 4 search banks • Manual tuning dial • BNC antenna connector • Scans 20 channels per second • 5.4" w x 3.1" h x 7.9" d, 2.4 oz..... **\$1099.99**



MFJ ENTERPRISES, INC.



752C SSB/CW Audio Filter Pull out stations from noise and interference. Peak, notch, low or high pass control helps eliminate heterodynes and interference. Filters tune 300 to 3000Hz; bandwidth varies from 40Hz to almost flat; notches to 70dB. Switchable inputs for two radios. Uses 9 to 18VDC. 10" w x 2" h x 6" d..... **\$89.99**



8100W Regenerative 10' wire makes world-wide stations come in loud and clear. Tune international shortwave, SSB/CW, RTTY and packet. Covers 75-13M SW bands. Vernier drive tuning. Uses 9V battery, earphones or plug-in speakers. 7" w x 2.5" h x 6" d, 1 lb..... wired **\$89.99**



956 LW/MW/SW Pre-selector/Tuner Improves reception of signals from 150kHz to 30MHz. Boosts signals while rejecting images, intermodulation, other phantom signals. 2" h x 3" w x 4" d..... **\$49.99**



AR-8600 MK II-B Multimode Mobile/Base Receiver Use as a mobile, base or portable. Powered from an external 12VDC supply. • All mode receive - including super narrow FM • Programmable tuning steps to 50Hz • RS-232 computer port (control software available online) • 530kHz- 3GHz (cell blocked) • 1000 memories (20 banks) • True carrier reinsertion in SSB modes • Improved front end with RF preselection of mid-VHF bands • Step adjust frequency, AFC • Noise limiter and attenuator • Versatile band scope with save trace facility • Twin frequency readout with bar signal meter • Separate volume and squelch controls • Write protect/key-pad lock • Programmable scan and search • Flash-ROM memory • Slot card sockets • BNC socket for 10.7MHz • 5.9" w x 2.2" h x 6.9" d, 4.9 lbs **\$899.99**

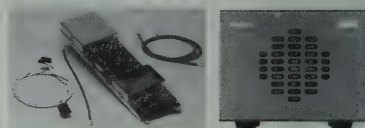
SDU-5600 Spectrum Display Unit "Next generation" in spectrum display. Operates with AR-3000AB, AR8600MKIIB & others equipped with 10.7MHz IF providing selection of center frequency, receive mode, etc. The high resolution, 5" color TFT display provides clear, crisp graphics. Built-in "waterfall" display function, FFT signal processing and analysis and DSP. Remote control via PC and more. 8.7" w x 4.7" h x 7.7" d, 5.1 lbs..... **\$1299.99**



DRAKE



R-8B Communications Receiver Covers 10kHz-30MHz (35-55MHz, 108-174MHz w/optional VHF converter) • Dual VFOs • 1000 memories • Multi-function scan • AM/FM/RTTY/CW/LSB/USB modes • 5 voice bandwidth filters • Built-in receive pre-amp/attenuator and noise blanker • S-meter • Pass-band offset • Selectable AGC • Built-in speaker • Multiple antenna inputs • Sequential tuning • 3 selectable tuning step sizes • Keypad entry of mode & bandwidth • Selectable sideband • Synchronous AM detector • RS-232 computer control • Speaker/recorder connections • Multi-voltage power supply • 13.5" w x 5.25" h x 13" d, 13 lbs **\$1499.99**



1590 VHF Converter (left) 35-55MHz and 108-174MHz **\$269.99**
MS-8 External Speaker (right) for R-8B.... **\$59.99**

The Ultimate in Technology

GRUNDIG

Satellit 800

AM/FM/Shortwave Radio

"The Best Radio on the Planet"

55 years of outstanding performance and service establishes Grundig as a leader in consumer audio. Decades of making the Satellit series defines these radios as the benchmark in Shortwave technology. The Satellit's extensive frequency coverage includes Long wave, AM-broadcast and Shortwave, covered continuously from 100-30,000 KHz; FM-stereo broadcast, 87-108 MHz; VHF aircraft band, 118-137 MHz.

as the benchmark in Shortwave technology. The Satellit's extensive frequency coverage includes Long wave, AM-broadcast and Shortwave, covered continuously from 100-30,000 KHz; FM-stereo broadcast, 87-108 MHz; VHF aircraft band, 118-137 MHz.

ENGINEERED FOR THE BEST POSSIBLE RECEPTION

- Single sideband (SSB) circuitry for listening to two-way communications, such as ham radio.
- Three built-in bandwidths, using electronically switched IF filters: 6.0, 4.0, 2.3 KHz.
- Synchronous detector for improved quality of AM and shortwave broadcast signals. Minimizes fading distortion and adjacent frequency interference.
- Selectable fast and slow AGC mode.
- High dynamic range, allowing for detection of weak signals in the presence of nearby strong signals.
- Excellent sensitivity and selectivity.
- Digital frequency display to 100 Hertz accuracy on AM, SW and VHF aircraft bands; 50 Hz when SSB used.
- A real tuning knob, like on traditional radios, but with ultra-precise digital tuning and with absolutely no audio muting when used.
- A modern, direct-frequency-entry keypad for instant frequency

- access and push buttons for fixed-step tuning.
- 70 programmable memories, completely immune to loss due to power interruptions. Memory scan feature.

LEGENDARY GRUNDIG AUDIO

- Outstanding audio with separate bass and treble tone control.
- FM stereo with headphones or external amplified stereo speakers.
- Includes high quality stereo headphones.
- Multiple audio outputs: line level output for recording, stereo headphone output.

FULL ANTENNA CAPABILITIES

- Built in telescopic antenna for SW, FM and VHF aircraft band.
- External antenna connections for the addition of auxiliary antennas, e.g. professionally engineered shortwave antennas; long-wire shortwave antennas; specialized AM broadcast band antennas for enthusiasts of AM DX'ing; FM broadcast band antennas; VHF air band antennas.

MORE HIGHLY DESIRABLE FEATURES

- Large, informational LCD display of operational parameters, measuring a massive 6 1/2" x 3 1/2". Easy to read and illuminated.
- Dual, 24 hour format clocks and dual programmable timers.
- An elegant, calibrated, analog signal strength meter.
- Auto backlight shutoff to conserve battery life.
- Low battery indicator.
- Operates on six internal 'D' cell batteries or the included 110V AC adapter (220V AC adapter is available).
- Dimensions: 21" L x 8 1/2" H x 9 1/2" W. Weight: 14.5 lb.

No Power? No Problem!

The FR200 AM/FM/SW Emergency Radio has a built-in power generator, which means No Batteries Required!



VB 400PE



S350



Grundig's Best Portable AM/FM/SW Radio

- Digital Dual-Superhet tuner • 1.711-30 MHz SW range • SSB with fine tuning control • 40 random presets • Direct frequency entry • Manual and auto tuning • Built-in antennas • Supplementary SW antenna • SW antenna jack • FM stereo with headphones • LCD shows frequency, time and more • Dual 24 hour clocks • Alarm • Sleep timer • Battery operated or included AC adapter.

Dimensions: 7 3/4" W x 4 5/8" H x 1 3/8" D.

VB 400PE AM/FM/SW Radio

Grundig's AM/FM/SW Field Radio

- Sensitive analog tuner with digital frequency readout • 3.28 MHz SW range • Fine tuning control • RF gain control • Low-pass filter • Built-in antennas • External antenna jacks • Stereo line level out • Separate bass, treble control • Digital clock with alarm • Sleep timer • Headphone jack • Uses 4 D cell batteries or included AC adapter.

Dimensions: 10 1/2" W x 6 1/2" H x 3 1/2" D.

S350 AM/FM/SW Radio

Emergency AM/FM/SW Radio/Light

- From the innovative minds at Grundig, even if the power is out and the batteries are dead, this potentially life-saving radio is ready to roll.
- Four Band Tuning - AM/FM/SW1/SW2 • Built in power generator • Rechargeable battery pack • 2 1/2" diameter speaker • Emergency light • Fine tuning knob • DC jack, earphone jack • 3 AA batteries (not included).

Dimensions: 6 3/4" W x 5 3/8" H x 2 1/8" D.

FR200 AM/FM/SW Emergency Radio

GRUNDIG



G-2000A Porsche Design Shortwave Radio Designed for Grundig by F.A. Porsche, This radio has a titanium finish look with a genuine leather case that closes around the radio like a book and serves as a stand. • Ranges: (FM) 87.5-108MHz; (MW) 530-1710kHz; (SW) 2.3-7.4 and 9.4-26.1 MHz • Modes: AM, FM-stereo (with earphones) • Illuminated multifunction LCD display • Digital keypad and Up/Down manual tuning • 20 user-set station memories • Clock with 12 or 24 hour selectable format, alarm (radio or buzzer) and sleep timer (10-90 minutes) • Built-in telescopic antenna for FM/SW and ferrite bar for AM • Includes a leather case, earphones, requires 3 AA batteries • 5.5" x 3.5" h x 1.25" d, 7.2 oz **\$79.99**



MINI WORLD 100 Portable Pocket AM/FM/SW Radio Analog tuning, receives AM (530-1710kHz), FM stereo and six shortwave bands: 5.8-6.4, 6.9-7.5, 9.4-10, 11.65-12.15, 15-15.65 and 17.5-18.4MHz. LED tuning indicator. Includes a case, belt clip and earbud phones. Operates from 2 AAs (supplied). 2.75" w x 4" h x 0.75" d, oz **\$29.99**

YACHTBOY 550 Sleek AM/FM radio and high-performance receiver, capturing 14 international shortwave bands. • 530-1710kHz AM, 88-108MHz FM, 1.711-29.999 MHz continuous shortwave • PLL-synthesized digital tuner • Direct keypad, up/down, scroll wheel, autoscans • 200 programmable station memory presets • Illuminated, multi-function LCD, simultaneously displays frequency and digital clock (selectable format, alarm, snooze and 5-120 minute sleep timer) • Signal strength and battery indicators • Built-in telescopic and internal ferrite bar antennas • Power backup • Shortwave/FM antenna input • Includes earbuds, stand, carrying case, shortwave guide and 3 AAs • 4.5" w x 6.5" h x 1.5" d, 10 oz **\$99.99**



CLASSIC 960 AM/FM Stereo/Shortwave World Receiver Updated classic combining vintage styling and craftsmanship with modern technology. Hand-crafted, solid wood cabinet and fabric grill cloth. • 4" front speaker, two 3" side speakers, stereo CD/cassette • 530-1710kHz AM, 88-108MHz FM, 4.5-12.5MHz SW1, 11.30-22.20MHz SW2 • 15.5" w x 11.25" h x 7" d, 9 lbs. 10 oz **\$149.99**

uniden



CB RADIOS

PC-78XL AM Mobile CB Radio Full PLL-synthesized 40 channels • DSC, Dynamic Squelch Control • Instant channel 9 • Microphone and RF gain controls • Delta tune control - Fine tunes received signal and reduces interference • Noise blanker and automatic noise limiter • PA/CB switch • Dimmer control • TX/TX LED indicators • Antenna warning LED - lights when high SWR condition is present • 7.25" w x 8.625" d x 2.375" h, 4 lbs. 3 oz **\$94.99**

PC-78LTW Same basic features as the PC78XL with the addition of NOAA weather channel reception with weather alert **\$99.99**



PC-68XL Bearcat Pro Series 40-Channel CB Radio Features a rugged front microphone, backlit control knobs, S/Rf meter, a channel indicator and dynamic squelch control. Additional features include a channel selector, TX/RX indicator, instant channel 9, RF and mic gain controls and PA mode. 6.25" w x 2.125" h x 9" d, 3 lbs **\$74.99**

PC-68LTW Same basic features as the PC68XL with the addition of NOAA weather channel reception with weather alert **\$79.99**



PC-78 ELITE Professional 40-Channel CB with Ergonomic Pistol Grip Mic Represents the highest quality communications device for use in the CB radio service - no license required. Combines CB radio with weather radio and alert system. Includes mobile mounting bracket and DC power cord. • Instant Channel 9 • Quickview analog S/Rf/SWR meter • Enhanced night vision display • Volume, squelch, RF gain, mic gain, delta tune and 7 weather channel select controls • (S/Rf)/CAL/SWR, CB/WX/PA, NB/ANL, Bright/Dim, Instant Channel 9, and dynamic squelch control switches • 7.59" w x 8.89" d x 2.64" h, 4 lbs. 3 oz **\$119.99**

PC-68 ELITE Professional 40-Channel CB with Ergonomic Pistol Grip Mic Same looks and features as the PC-78 Elite with exception of delta tune control and SWR in Quickview analog S/Rf meter. • 6.2" w x 5.4" d x 2.1" h, 3 lbs. 11 oz **\$99.99**



PRO-520XL Compact 40 Channel AM Mobile CB Radio 4W • Instant channel 9 access • 4-segment S/Rf meter • TX LED • LED channel indicator • RF gain • PA switch • Automatic noise limiter • 4.5" w x 6.75" d x 1.375" h, 1 lbs. 10 oz **\$54.99**



PRO-510XL Compact 40 Channel CB Radio Incorporates state-of-the-art microelectronics into a sophisticated Euro-styled 2-way radio. Front mounted microphone, ANL Switch, S/Rf LED meter. 4.5" w x 1.375" h x 7.5" d, 3 lbs. **\$39.99**



RECOMMENDED ANTENNAS FOR CB

COBRA

HGA-1000 Magnet mount base loaded mobile antenna with coax and connector **\$19.99**

HUSTLER

HQT A 55" top loaded whip with Mirror Mount bracket. Comes with 12' cable with PL-259 connector. Chrome with a white coil **\$27.99**

HQ-27M A 55" top loaded whip with Trunk-lip Mount. Comes with 15' cable and PL-259 connector. Chrome with a white coil **\$36.99**

LARSEN

NMO-27C Base loaded mobile, less mt. **\$32.99**

NMO-TLP Low-profile trunk mount for NMO-27C. 17" coax and PL-259 **\$29.99**

NMO-MM NMO-27C magnet mount. Comes with 12' coax and PL-259 connector .. **\$32.99**

SOLARCON

A-99 Base Station Antenna. Three-piece fiberglass design uses a half wave over a quarter wave section, and is tunable. Entire 17 ft. 8 in. length radiates producing about 3 dB gain **\$64.99**

GP-1 A-99 ground plane kit. Adds 30% more power gain and lower angle of radiation **\$39.99**

WILSON

W-1000 5' base loaded mobile antenna. Available in three mount configurations. All come with 18' cable and PL-259 connector.

ROOF thru-hole mount **\$57.99**

TRUNK mount **\$65.99**

MAGNET mount **\$76.99**



Cobra

CB RADIOS

148NW ST Full Featured AM/SSB Mobile CB Radio 12W PEP SSB RF output • 4W AM RF power (FCC max. allowed) • 120 channels • Dual conversion AM receiver • SoundTracker™ system • Night-Watch™ dimmer control • USB/LSB/AM • Digital channel indicator • RX/TX indicators • Switchable noise limiter & blander • RF-gain control • Hi/low tone switch • PA capable • SWR indicator • Instant channel 9 • 7.25" x 2.25" x 8.625", 6 lbs. **\$179.99**



19DX III AM Mobile CB Radio Compact design • 40 channels • Combination S/Rf meter • 4W RF output (max. allowed) • Instant channel 9 switch instantly switches from any channel to Emergency Channel 9 • TX indicator • CB/PA switch selects CB operation or PA operation • Mobile bracket • 4.563" w x 1.75" h x 7.25" d, 21 lbs **\$49.99**



29WXNW ST Full-featured Weather Band CB Radio with Illuminated Front Panel 40 channels, AM • Instant channels 9 and 19 • 7 NOAA weather channels with weather alert tone • 4W RF power output • SoundTracker™ system • Tactile controls • Dimmer control • Switchable automatic noise limiter and noise blander • SWR calibration • PA capability • NightWatch™ illuminated front panel • 7.2" w x 2.2" h x 8.6" d, 6 lbs **\$129.99**

HH-ROAD TRIP SoundTracker® 40 Channel CB Handheld with Antenna Keep in vehicle for 24-hour emergency access, to communicate between vehicles, and to receive the latest weather information from 10 NOAA channels. SoundTracker® system cuts noise up to 90% and 4W of power gives up to 4 miles range. High/low power switch reduces power consumption, extending battery life. Operates on 9 AA alkaline or NiCads or off vehicle battery with the included DC cord with cigarette lighter plug. Included magnet-mount antenna provides maximum range and flexibility. 6.75" h x 2" w x 1.75" d **\$79.99**



20 XTR Xtream Street Communicator CB Transceiver Features neon blue front panel illumination and illuminating antenna when transmitting. Includes 4-pin screw-on dynamic mic, antenna, mobile mount bracket and hardware. • 40 channels • LED display • 4W (AM) • CB/PA switch • Power/volume and squelch controls • Magnetic mount antenna base • 6.25" w x 1.75" h x 6.5" d, 2 lbs..... **\$79.99**



FRS RADIO

PR-3000-2DX MicroTalk® GMRS/FRS Two-way Radio X2 POWER TECH provides increased power for up to 6 miles and stronger penetration of buildings, cars, dense woods and other obstacles. 22 channels (7 FRS/GMRS, 7 FRS, 8 GMRS) • 38 privacy codes • Scan (channel/privacy code) • Vibra Alert® Silent paging • Call alert (10 selectable tones) • Selectable roger beep • Hands-free operation (VOX) • Selectable high/low power (GMRS) • Backlit LCD • Battery/power saver • Key lock • Belt clip and wrist strap • Requires 4 AAA batteries (per radio, not included). 2.25" w x 6.5" h x 1" d pair **\$79.99**



MOTOROLA

FRS/GMRS RADIOS

T-5950-2/AA 22 Channel GMRS/FRS Rugged Motorola quality with clear communications whether skiing or hiking rough terrain. Built to withstand harsh environments and provide extra communications range (up to five miles) depending on terrain and conditions. • 1W maximum transmit power • 7 GMRS/FRS 1W channels • 7 FRS 0.5W channels • 8 GMRS 1W channels • 8 NOAA weather channels • 99 codes, 10 audible call tones • Hands-free VOX • Multiple scanning functions • VibraCall® alert • Keypad lock • Backlit display • Removable swivel belt clip pair **\$79.99**



T-4500-2 22 Channel GMRS/FRS Offers the ultimate in small size GMRS radios, compares to the smallest cell phones or pagers. Weather resistant design. Up to 2-mile range • 500mW maximum transmit power • 7 GMRS/FRS channels • 7 FRS channels • 8 GMRS channels • Scanning • Audible call tone talk confirmation tone • Audible low battery alert • Uses AAA alkalines pair **\$29.99**

ICOM

FRS/GMRS RADIOS

IC-F21GM FRS/GMRS Radio (left) Perfect for sportsmen, families, clubs, hobbies, or when you need more power than an FRS radio offers. Choose from 15 higher power GMRS channels, 7 channels shared with FRS. Communicate with any FRS radio on these channels. All channels are pre-programmed internally allowing out-of-box operation, only a simple license required. Apply on the FCC web site, complete instructions included. 462.550-467.725MHz (UHF) coverage • 4/2/1W • CTCSS/DTCS signaling for more privacy • Scanning and "Tone Find" seek active channels • Meets various MIL-STD requirements • Drop-in charger included • 2.1" w x 5" h x 1.5" d, 10.6 oz .. **\$149.99**



IC-4088A FRS FM Transceiver (right) Professional quality. Features 14 FRS channels, 38 group codes and enhanced conversation privacy with its built-in voice scrambler. Communication range is approximately 2 miles in wide open space and you get approximately 28 hours of operation from 3 AA alkaline batteries (not supplied). Splash resistant construction for outdoor use. Convenient rechargeable NiCad battery and rapid charger available, as well as optional headsets and microphones. 2.375" w x 4.563" h x 1.563" d **\$89.99**

maxon

49MHz FM PERSONAL COMMUNICATORS

Low power, 1/4 mile average range • Dual conversion super-heterodyne receiver provides crisp, clear transmission • Use for group communications • Push-to-talk or voice activated - talk-to-transmit • No license required • Channels: 49.830MHz, 49.845MHz, 49.890MHz, 49.860MHz, 49.875 MHz **MX-49SX** A single channel unit including a lightweight adjustable headset with retractable whip antenna and boom microphone with windscreens. Uses only one of first 3 channels (see above) • LED power indicator • battery charger jack • Range up to 1/4-mile • Uses two "AA" alkalines or rechargeable nicads • 5" w x 2.5" h x 1" d, 9 oz **\$29.99**



MX-49FX The unique earphone and mic pick up voice vibrations from the ear canal for transmit audio and also provide received audio • Will not interfere with helmets • 5 selectable channels • Built-in antenna gives up to 1/8-mile range • Remote PTT button and channel selector. Uses 3 "AA" batteries. 5.5" w x 3" h x 1" d 6 oz **\$49.99**

Uniden



HANDHELD SCANNERS

BC-60XLT-1 Handheld Scanner (left) 30 programmable channels, 10 bands - cover 29-512MHz • LCD channel display • Programmable chain search • One-touch weather • Lockout • Memory backup • Keypad lock • Scan delay • Manual channel access • Track tuning • Keypad lock • Uses four AA alkaline or nicad rechargeable batteries, or operates on AC with included 110V AC adapter • 2.625" w x 6.75" h x 1.5" d, 10.5 oz **\$89.99**

BC-80XLT Handheld Scanner Looks similar to 60XLT • 50 programmable channels, 11 bands, 5 banks - cover 29-956MHz (cell blocked) • 5 priority channels • On-touch weather • Manual channel access • Bands search • Full frequency LCD display • Uses four AA alkaline or nicad rechargeable batteries, or operates on AC with included AC adapter • 2.625" w x 6.75" h x 1.5" d, 10.5 oz **\$119.99**

BC-245XLT TrunkTracker II Handheld Scanner (middle right) 300 programmable channels, 12 bands including Aircraft and 800MHz (covers: 29-956 MHz - cellular blocked) • Trunk tracking technology: scan and search, lock out, delay, and 10 trunk scan list • Programmable search • Memory backup • Manual channel access • Pre-programmed service search • Channel lockout • 10 priority channels • Rechargeable NiCad battery and wall charger • 2.5" w x 6" h x 1.75" d, 12.5 oz **\$209.99**

SC-180B Sportrac (middle left) Hear car and pit crews at auto races, the cockpit at air shows, or use it as a traditional scanner to keep up with emergency personnel. 100 programmable channels, 12 bands/800 MHz (cell blocked)/Air, 10 bands • 10 priority channels • Twin TurboScan™ and search • Manual channel access • Instant weather • Full frequency, alpha-numeric LCD • Rechargeable NiCad and wall charger • Includes sports frequency guide, AC adapter, rubber antenna, belt clip and earphone • 2.5" w x 1.625" d x 6" h, 11 oz. **\$169.99**

SC-200 Sportrac Same as above with 200 channels, cloning capability and CTCSS **\$199.99**

BC-250D Digital-Capable* Handheld Scanner (right) Continuous coverage from 25MHz to 1.3GHz (cell blocked) • AM/FM/NFM/WFM modes • TrunkTracker III - EDACS, Motorola, E.F. Johnson • 30 trunking channel indicator annunciators • 1000 channels, 10 banks • 12 service searches • CTCSS/DCS • S.A.M.E. weather alert • Alpha tagging (bank channel and search range) • PC programming and control • Holographic, backlit display • Backlit keypad • 2.5" w x 6.9" h x 1.75" d, 14 oz **\$269.99**

*Requires installation of BCI25D card (\$239.99) in order to monitor APCO P-25 digital systems.

BC-296D APCO P-25 Digital-Capable, Handheld Scanner 25MHz to 1.3GHz continuous (cell blocked) • AM/FM/NFM/WFM modes • 1000 channels, 10 banks • S.A.M.E. weather alert • TrunkTracker III (EDACS®, Motorola®, E.F. Johnson) • APCO 25 digital-ready (trunked at 3600 and mixed mode digital communications) • 12 service searches • CTCSS/DCS • Alpha tagging (bank channel and search range) • PC programming and control • Holographic, backlit display • Backlit keypad • 2.56" w x 6.02" h x 1.77" d, 12.38 oz **\$549.99**



BEARCAT SCANNERS

BC-244CLT 30 programmable channels, 10 bands • Full freq. LCD • Channel lockout • Mem. back-up • Manual channel access • Alarm clock • One-touch weather • 8" w x 5.5" d x 3" h, 1 lb. 6 oz **\$99.99**

BC-248CLT AM/FM alarm clock radio with 20 presets • 50 programmable channels, 10 bands • One-touch weather • Full frequency display • Auto squelch • Lockout • Memory back-up • Manual access • Delay • 5 priority channels • 10" w x 5.5" d x 3" h, 1 lb. 6 oz **\$109.99**

BC-278CLT AM/FM Alarm Clock Radio with 20 presets • 100 channels, 12 bands • 800MHz coverage (cellular blocked) • One-touch weather with S.A.M.E. weather alert • Full frequency display • Auto squelch • Lockout • Memory back-up • Manual channel access • Programmable delay • Data skip key • Programmable search • Programmable service search • 5 priority channels • 10" w x 5.5" d x 3" h, 1 lb. 7 oz **\$139.99**



BC-780XLT Continuous Band Programmable Scanning Radio AM/FM/WFM • 500 channels (10 priority), 10 banks • 25-511MHz, 806MHz-1.3GHz (cell blocked) • Preprogrammed service searches • Full frequency, backlit LCD • TrunkTrackerIII • S.A.M.E. • SmartScanner™ • Clone feature • Alpha tagging • CTCSS/DCS • PC control • Base or mobile • Record channel or ID (up to 1000 IDs) • 7" w x 6.56" d x 2.375" h, 41.96 oz **Closeout \$269.99**

BC-785D Digital-Capable* Base/Mobile Scanner (looks similar to above) 25MHz-1.3GHz (cell blocked) • TrunkTracker III (EDACS®, Motorola®, E.F. Johnson) • S.A.M.E. • Full frequency LCD • 1000 channels, 10 banks • AM/FM/WFM modes • 12 service searches • Alpha tagging • CTCSS/DCS • Control channel only mode • Clone feature • PC programming/control • Record functions • Backlit controls • 7" w x 6.5" h x 2.375" d, 14.9 oz **\$289.99**

*Requires installation of BCI25D card (\$239.99) in order to monitor APCO P-25 digital systems.



BC-350A 50 channel, 11 band mobile/base scanner with Aircraft and instant weather • Super TurboScan™ @ 100 channels/sec. • Full frequency LCD display • Private channels, 20 programmable and scanable • Police channels • 10 programmable fire and emergency channels • Marine channels • Band search • Lockout channels • Mounting bracket, AC adapter, telescoping antenna cigarette and DC cord • 5.25" x 6.8" x 1.625", 1.6 lb **Closeout \$89.99**



BC-350C 800MHz Mobile-Operation Scanner Hear police, ambulance, fire, amateur radio, public utilities, weather, and more! • 25-54, 108-174, 406-512, 806-956MHz (cell blocked) • 6 preprogrammed service banks • 13 preset search bands • 50 user-programmable "private channels" • 150 memories • Preprogrammed service search • Search lockouts • Turbo search @ 100 channels/sec • Backlit LCD • Includes mounting bracket, AC adapter, DC cord with plug • 5.25" w x 6.5" x 1.625", 1.6 lbs **\$99.99**



BC-796D APCO P-25 Digital-Capable Scanner 25MHz-1.3GHz continuous (cell blocked) • AM/FM/WFM • 1000 channels (10 banks, 10 priority) • S.A.M.E. • APCO 25 digital-ready (trunked at 3600 and mixed-mode digital communications) • TrunkTracker III (EDACS®, Motorola®, E.F. Johnson) • Control channel only mode • 12 service searches • CTCSS/DCS • Alpha tagging (bank channel and search range) • Alpha display • Clone feature • PC programming/control • Record functions • 1000 beep alerts • Base/mobile • Full-frequency LCD • 7" w x 6.5" h x 2.375" d, 50.8 oz **\$549.99**



BC8 BearTracker™ Warning System with 800 MHz TrunkTracker III 25-54, 108-174, 400-512 and 806-956MHz (cell blocked) • Trunking (Motorola® analog trunking, EDACS®/EDACS® SCAT, LTR®) • 250 user-programmable memories • BearTracker™ warning system - alerts to activity on highway patrol frequencies within 3 miles • Preprogrammed service search and highway patrol frequencies by state • Priority operation • 100 channel/sec scan speed • Search lockouts • Backlit LCD • 7.06" w x 2.44" h x 6.1" d, 21 lbs. 7 oz **\$179.99**

Service Questions?

414-358-4087
Milwaukee, WI

ICOM

SCANNERS

R-3-26 Communications Receiver Provides wideband capability from 0.5-2450MHz (cell blocked). Features 2" TFT color display, or switch to mono. Receive favorite TV shows, scan for wireless cameras like those in race cars. Use as a monitor with a wireless camera. Display to a large monitor or recording device with A/V output. Signal strength and band scope functions assist in finding action. Includes 450 alphanumeric memories, CTCSS, attenuator. Li-ion battery offers easy charging, light weight, and up to 27-hour use with mono LCD • PC programmable • 2.4" w x 4.72" h x 1.28" d, 10.6 oz **\$349.99**

R-5-06 Super Wideband Handheld Receiver Covers 495kHz to 1309.995MHz (cell blocked), AM, FM, WFM modes. Preprogrammed TV and shortwave memories. Listen to AM/FM broadcast radio, police, fire, military, aircraft, amateur bands, and more. Crisp, clear audio. Large, backlit LCD shows frequency, operating and battery status, signal strength and alphanumeric naming (1250 memories – 200 auto-write scan and 25 scan edge pairs). • DMS • CTCSS/DTCS • Internal bar antenna • Weather alert • PC programmable/cloning • Weather resistant • Rechargeable NiCad and DC jack. 2.25" w x 3.4" h x 1" d, 6 oz. **\$199.99**

R-10-05 General Coverage Pocket Scanning Receiver 500kHz-1300MHz (cell blocked). AM, SSB, FM wide or FM narrow modes. Programmable tuning steps. On-screen spectrum display, 1000 non-volatile memory channels in 18 banks of 50 channels. Scan by bank, mode, or program. Alphanumeric characters can be entered to identify channels and banks. Noise blanker and auto noise limiter. Auto frequency control (AFC) • Edge-lit display • 24-hr clock with timer • PC program. capability • Adjustable LCD contrast • Signal indicator • Power-saver • NiCads and wall charger (also will use alkaline or DC) • 2.3" w x 5.1" h x 1.2" d, 10.9 oz **\$299.99**



uniden
BC-895XLT "TrunkTracker" • 300 channels (10 priority), 12 bands (Aircraft and 800MHz), 10 banks • VFO control, covers 29-511, 806-956MHz (cell blocked) • TurboScan™ • One-touch weather alert and alert • Manual channel access • CTCSS • Trunk search • Scan lockout/delay • RS-232C port • Signal strength meter • Auxiliary tape output • Automatic store • 30 trunking channel indicator annunciators • 3-day memory backup • Programmable search • Lockout • 10.875" w x 3.625" h x 7.5" d, 3.5 lbs **\$199.99**

R-20 Wideband Handheld Receiver Covers 0.15-3304.9999MHz (cell blocked) • SSB/CW/AM/FM/WFM modes • Preset TV sound and shortwave frequencies • 1250 memories – 1000 memory, 25 scan edge, 200 auto-write scan • Multiple scan functions (30 channels/second high speed scan capability and Voice Scan Control) • Built-in IC audio recorder with selectable recording time up to 4 hours • Auto squelch function • CTCSS/DTCS/DTMF decode • Attenuator and RF gain control • Noise blanker and automatic noise limiter • Backlit keypad and dot-matrix LCD with programmable channel names (up to 8 characters) • Internal bar antenna for MF reception and BNC antenna connector • CI-V PC control capability • Li-ion battery pack • 2.28" w x 5.5" h x 1.22" d.

This device has not been approved by the FCC. It may not be sold or leased, or offered for sale of lease, until approval of the FCC has been obtained.

AIRCRAFT

A-23 Airband HT Easy to operate featuring large, clear LCD. Record and play back conversations with built-in recorder. Large capacity rechargeable NiMH battery is standard. Convenient for carrying with supplied belt clip. Water resistant, JIS-4 grade, allows safe operation in rain. 5W (PEP), 1.5W (carrier) output • All 760 "COM" (108MHz-136.975 MHz) and weather channels • VOR navigation (rx only) • 200 alphanumeric memories • PC programmable • 2.28" w x 4.22" h x 1.13" d, 12 oz **\$399.99**

MARINE

IC-M3A Mini Hand-held Marine VHF Radio (left) All US, international and 10 weather channels with alert • Independent channel 16 • Full function and priority scanner • Dual and tri-watch monitors channel 16 while operating another • 1/5W • Backlit display • Water resistant • Includes 6 NiCads and wall charger • 2.25" w x 5.5" h x 1.75" d, 14.4 oz **Closeout \$149.99**

IC-M1V Marine Handheld (right) All US, Canadian, international and weather channels with alert • Normal and priority scan • "Tag" scan system • 5W • Dual/tri-watch • PC programmable • Alphanumeric • Waterproof • 1400mAh li-ion battery • 2.1" w x 5.5" h x 1.18" d, 9.9 oz **\$199.99**

IC-M32 VHF Marine Handheld Transceiver (middle) All International, USA, Canadian and WX channels • Weather alert and auto weather scan • Instant channel 16 • SW • Convenient tag scanning • Dual/tri-watch • Backlit 9-button keypad • Easy-to-see LCD with backlighting • Battery life indicator and 2-step power saver • Squelch and volume level indicator • Rugged, waterproof (equivalent to JIS Grade 7) • Includes NiCad pack, desktop charger, AC adapter, antenna, belt clip and hand strap • 2.4" w x 5.3" h x 1.6" d, 12.7 oz **\$149.99**



IC-M302W02 VHF Marine Transceiver All International, USA, Canadian and WX channels and alert • Instant channel 16 • 25/1W output (at 13.8VDC) • Dual/tri-watch • GPS connection • Large backlit LCD shows channel numbers and names up to 10 characters • Built-in DSC capability (send a formatted distress message) • High sound pressure speaker • External speaker connection • Rugged, waterproof (JIS Grade 7) • Includes hand microphone, mounting bracket kit and DC power cable • 6.1" w x 2.6" h x 5.2" d, 1.8 lbs **\$159.99**



IC-M402W02 Marine VHF Radio All US, Canadian, international and 10 WX channels with alert • Normal/priority scan • Dual/tri-watch • 2-digit LCD with scrolling channels • 4-level backlighting • Key illumination • DSC capability • Built-in SC-101 selective calling • GPS repeater (with added GPS) • "Tag" scan • 25W/1W • Waterproof • 6" w x 2.6" h x 5.5" d, 2 lbs **\$199.99**



M-710 (21) SSB Marine Transceiver Rugged, 150W, 1136 channels with 160 user-programmable memories, PC programmable, alphanumeric read-out on large LCD. General version without 2182kHz alarm, marine bands only. Special Order **\$1399.99**



M-802 DSP Marine SSB Transceiver Large backlit LCD with dot matrix characters, and built-in digital selective calling. Also boasts one-touch e-mail and GPS input. • 0.5-29.999MHz rx • 1.6-2.99, 4-4.99, 6-6.99, 8-8.99, 12-13.99, 16-17.99, 18-19.99, 22-22.99, 25-27.5 tx • J3E (SSB), J2B (AFSK) F1B (FSK), A1A (CW), M3E (AM, rx only) • 1355 channels • 20/60/150W • 9.2" w x 3.7" h x 9.1" d, 10.3 lbs. • 8.3" w x 4.4" h x 3.1" d, 1.2 lbs. (controller) • 4.4" w x 4.4" h x 3.1" d, 0.8 lb. (speaker) Special Order **\$1749.99**

uniden®

MARINE

ATLANTIS-250 Hand-held 2-Way VHF Marine Durable, reliable for any marine activity • All US, international and Canadian marine channels • Waterproof (JIS4/CFR46) • 5/1W output, switchable • Instant channel 16/9 • Triple watch • All N.O.A.A. channels with WX alert • Backlit LCD and keypad • Memory channel scan • Flexible rubber antenna • NiMH and alkaline capability..... **\$99.99**

VOYAGER Ultra Compact VHF Handheld Marine Radio All USA, Canadian and international channels • All N.O.A.A. channels with S.A.M.E. WX alert • Triple Watch Plus™ • Channel 16/9 • Memory scan • 1/5W transmit • Backlit keypad and LCD • Rubber grips/seal • Li-ion battery • AC/DC adapter and charging cradle • Flexible rubber antenna • Meets JIS7 waterproof specs • 3.8" h x 2.4" w x 1.3" d, 8.8 oz..... **\$159.99**

MYSTIC 5W output • DSC • Integrated mapping WAAS GPS • Send, receive and mark directly on map accurate vessel or individual position • Includes CD of all U.S. street data, up to 32MB can be loaded at any time • Large VGA display for all charting, mapping and radio functions • Submersible • Supplied complete with large Li-ion battery, AC/DC chargers and charging cradle • 6.88" h x 2.62" w x 1.38" d..... **\$339.99**

SOLARA 25W VHF Marine Radio Full-featured • All USA/international channels • Instant channel 16 • 10 weather channels • Selectable 1/25 Watt output • High visibility LED display • Front mounted speaker for improved sound quality • Transmit LED indicator • Weather resistant housing, microphone and connector **\$99.99**



OCEANUS-DSC Full Featured VHF Marine Radio All USA/international/Canadian marine channels • N.O.A.A. weather scan and alert • Triple Watch Plus™ - monitor emergency channel 16 and 9, another user selectable channel plus Weather Alert • Ultra-compact rugged construction saves space, allows for convenient mounting, and withstands the harshest conditions • Quik Command™ one-touch channel 16/9 key on new, durable, rubber grip mic • Backlit keypad • Memory scan • 1/25 W transmit • LCD and dimmer • External speaker jack • One switch PA operation..... **\$139.99**

OCEANUS VHF Marine Radio (not pictured) All USA/international marine channels • 25/1W output • Compact, rugged construction • QuikCommand™, one-touch channel 16/9 key on mic • Rubber grip mic • Backlit keypad • Triple watch • Memory scan • Weather alert/scan • LCD and dimmer • External speaker jack • PA..... **Closeout \$129.99**



POLARIS VHF Marine with Digital Selective Calling and Hailer All USA, international and Canada channels • Instant channel 16/9 • 1/25W transmit • Wireless mic capability - works with up to two wireless mic accessories • GPS input capable • Backlit LCD and keys (including microphone) • S.A.M.E. weather alerts • Triple Watch Plus™ • 2-way hailer • Memory and weather scan • Assign channel names • Group call feature • Calling radio position indications with external GPS • Waterproof to JIS4/CFR46 standards • 3.07" h x 7.24" w x 6.61" d, 2.65 lbs..... **\$179.99**

YAesu

AIRCRAFT

VXA-700 "Spirit" Airband, 2M Transceiver (4 transceivers in one!) AM airband, 2M amateur, NAV-COM, 5W output, VOR/CDI display (121.5MHz emergency) • NOAA WX with alert • FM broadcast band receive (88-108MHz) • Submersible at 3' for 30 minutes • Magnesium die cast case (superior RF noise shielding plus ruggedness) • High res, backlit, dot matrix display • 190 alphanumeric memories • Back lit keypad • Supplied with 1300 mAH Li-ion battery, 117V charger, headset adapter, antenna and belt clip..... **\$419.99**

VXA-150 DELUXE Pro V Professional-grade, compact, airband handheld transceiver. Transmits at 5W (PEP), 1.5W carrier output on 118-136.975MHz "COM" band, and receives 108-117.975MHz "NAV" band. Features exclusive two-mode display with upright or inverted viewing when on a belt, NOAA weather monitoring, 8-character alphanumeric display, 50 memories (100 "book"), antenna adapter and NiMH battery. 2.3" w x 4.3" h x 1" d, 12 oz..... **\$299.99**

VXA-210 Pilot Professional-grade airband transceiver with VOR navigation display meeting MIL-STD 810 ruggedness specs. 5W (PEP) transmit, 1.5W carrier output. Receive on 118-136.975 MHz "COM" and 108-117.975 MHz "NAV" bands. The VOR navigation display features DVOR/ CDI modes. Receives all NOAA weather channels. Has 150 memories, and 8-character alphanumeric display. Includes headset adapter, intercom, and external PTT switch. PC programmable. 2.3" w x 4.3" h x 1.2" d, 12.2 oz. **Closeout \$299.99**

VXA-210 DELUXE Same as above, with addition of antenna adapter and NiMH battery **\$354.99**

KENWOOD



MARINE

TKM-707 SSB Marine Transceiver A high-performance unit designed to meet stringent marine operation demands. Utilizes heavy-duty, rustproof, aluminum chassis and highest quality parts to maximize performance • 150W RF output • 2-23MHz marine operation with 500kHz-30MHz general receive • 198 memories • Multi-scanning • Emergency alarm built-in..... **Special Order \$1249.99**

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1-800-634-0227

GPS-12XL Personal Navigator™ for Extreme Outdoor Enthusiasts 12-channel receiver with external antenna for fast, accurate position fixes in tough conditions like tree canopy and urban obstructions. Rugged, compact case ideal for boaters, hunters or hikers. 500 user waypoints with alphanumeric name and user comments. 20 reversible routes of up to 30 waypoints each. TracBack™ navigation turns a track log into a route back home. Nine waypoint alarms. Over 1000 track log points, position averaging, emergency erase, and cloning features. Up to 12 hours operation on 4 "AA's"..... **\$219.99**

NAVITALK™ Navigator™/Cellular Mobile Combines GPS with cellular technology into one handheld unit. During travel, location is displayed in real time on a built-in map. Send exact position to another NavTalk for display. Cell phone: Customized phone book • One-touch speed dial • Built-in pager • One-touch emergency dial (subscription required) GPS: Interstates with exit info, cities, airports, etc. Plug into a PC and download from optional MapSource™ CDs..... **Closeout \$169.99**

RINO-120 GPS-Enabled Handheld for FRS and high-performance GMRs • Two-way communications up to 2 miles using FRS (up to 5 miles, using GMRs) • 0.5/1W (FRS/GMRs) • 14 channels, 38 squelch codes, and VOX • Voice scrambler • Vibration mode for "silent" calls • 12-channel, GPS receiver provides position accuracy of less than 10' when enabled • Peer-to-Peer positioning to transmit GPS location, showing distance and bearing • Navigation features include extensive waypoint storage, TracBack, multiple position formats and built-in trip computer • Basemap of the Americas (major cities, highways, thoroughfares, rivers, lakes, coastlines, borders, and railways) 8MB internal memory accommodates downloadable cartography from GARMIN's MapSource CD-ROMs • Uses 3 "AA's" • 8.5 oz..... **\$249.99**

GPS-72 Low-cost solution for land/marine navigation providing precise positioning using WAAS data. • Built-in quad helix antenna • High-contrast, gray-scale display ("large number" option) • Backlit display/keypad • Permanent data storage • Water resistant • 500 name and graphic waypoints, 50 reversible routes • Lat/Lon, UTM, Loran TDs, Maidenhead, MGRS, and user grid formats • Arrival, off-course, clock and proximity alarms • 1 MB memory for MapSource™ data • Trip computer with odometer, stopped time, moving/overall average, total time, max. speed..... **\$159.99**

IQUE-3600 PDA With Integrated GPS The power of Palm OS integrated Que 5, Garmin GPS and mapping software. Look up appointments or contacts and get routing to their location with voice-guidance! New ARM processor enhances battery life, screen re-draw, graphics, and audio • SD expansion slot for storage • Flip-up, integrated GPS patch antenna for optimal reception • MP-3 player • Memo playback • Voice recorder • Rechargeable internal li-ion battery • 32 MB memory • Soft cover, metal stylus • Choice of Americas or Atlantic MapSource™ • High res, color, 2.16" w x 3.24" h display • 2.8" w x 5" h x 0.8" d..... **\$549.99**

eMAP DELUXE Electronic Map 12-parallel-channel GPS and internal patch antenna with basemap showing cities, interstates, exits, etc. • Large, backlit screen • Zoom keys with one-hand rockerpad operation • Trip computer with odometer, stopped/moving/total time, moving/overall average and max. speed • Map page with direction, speed, time, distance/time to go, trip distance • Save up to 500 sites • 2000 track points • 12 hours on 2 AA's • Interface cable, 8MB card, wrist strap • 2.4" h x 5.5" w x 0.8", 6.7 oz **Closeout \$199.99**

eTREX (left) 12-parallel-channel GPS receiver and internal patch antenna packaged in a waterproof case. Side operating buttons for larger display. Simple menus and logical operations make position marking easy. • Compass or map navigation • Zoom keys • 500 user waypoints with name and graphic • 1 route with 50 waypoints • Resettable trip computer • Auto track log, 10 saved tracks to retrace a path • Up to 22 hours of use with 2 AA alkalines • 4.4" h x 2" w x 1.2", 5.3 oz..... **\$99.99**

eTREX SUMMIT™ Hiking Companion (right) Similar to the eTrex but includes a barometric altimeter and electronic compass..... **\$199.99**

GPS-III PLUS Personal Navigator™ Dash mount. Road maps without plug-in cartridges. Selectable vertical or horizontal display. Dedicated keys for zooming from 0.2-360 miles, diagonal panning, auto start/stop timer, average/max. speed recordings. Rocker keypad, backlit LCD, full featured moving map plotting, user selectable navigation screens for compass or graphic highway guidance. Download data from MapSource CDs **Closeout \$299.99**



GPS-V DELUXE (left) North American turn-by-turn navigation with auto-routing. Display prompts and audible alerts for turns, course deviation, and distance. Built-in, routable basemap provides detail for interstates, exits (USA only), highways, rivers and lakes, plus popular metro streets. Maps from MapSource MetroGuide provide residential detail. Look up services, points of interest. View address, phone and map location. 500 user waypoints • 20 reversible routes • Trip computer with odometer, stopped time, moving/overall average or total time, max. speed • Auto track log, 10 saved • 4 AA's for up to 25 hours use • Permanent data storage • Includes mount, cigarette lighter adapter, PC cable and City Select software (no internet access required) • 2.32" h x 5.0" w x 1.62" d..... **\$399.99**

ST PILOT III DL StreetPilot III Deluxe (right) Portable GPS with auto routing and voice prompts alerting to upcoming turns. Shows position on a detailed color map. Automatically calculates a route from current location and displays turn-by-turn directions. Included MapSource™ City Navigator™ software provides more map detail, and, with downloaded detail, look up points of interest and view address and phone information. Portable for use in multiple vehicles. Also includes: StreetPilot III satellite navigation system • Dash mount • 12V adapter cable with speaker • 128MB data card • USB programmer for faster map downloads... **\$699.99**



ST PILOT 2610 Street Pilot 2610 GPS Unit The best in automotive navigation right at your fingertips. Choose a destination using StreetPilot's touch screen or remote control unit and the route will be automatically calculated with turn-by-turn directions and voice prompts. • Built-in basemaps containing state and country boundaries, lakes, rivers, streams, airports, cities, towns, coastlines, state and interstate highways, local thoroughfares and secondary roads within metro areas, federal interstate highway exit service information • Accepts downloadable map detail from Garmin PC-based MapSource City Navigator CD-ROM (included), which provides street-level detail, addresses, listings of nearest restaurants, hotels, ATMs and more • Alphanumeric remote control • Bright, automotive-grade 8-bit, 256-color LCD with automatic dimming backlight and 305 x 160 pixel, 3.3" w x 1.7" h, touch screen • 5.6" w x 3.2" h x 2.0" d..... **\$999.99**

Software compatible with some Garmin GPS units can be found under "Multi Media."



GEKO-101 Perfect for navigation novices. Features such as one-touch waypoint marking make it a snap to use. Easily maneuver from one waypoint to the next using its 250-waypoint storage capacity with symbols, and trace along a route with PanTrack™.

- Five buttons for one-hand use
- High-contrast display – 64 x 100 pixels with LED backlighting
- 12-hour battery life on 2 AAA's

• Automatic 3,000 trackpoint storage with PanTrack™ and TracBack® • 30 min. submersion at one meter • 1.9" w x 3.9" h x .96" d, 3.1 oz. **\$99.99**

GEKO-201 Allows more waypoint and route storage, as well as available PC and external power connectivity. It also offers built-in WAAS capability. Has a user-configurable trip computer and 10,000 trackpoints, as well as PanTrack™ and TracBack®. • 10 feet accuracy or less with WAAS • Five buttons for one-hand use • 64 x 100 pixel, high contrast display • 12-hour battery life on 2 AAA's • 500/20 x 125 waypoint/route storage • Automatic 10 track storage • 30 min. submersion at one meter • Includes four interactive, outdoor games • 3.9" h x 1.9" w x .96" d, 3.1 oz. **\$139.99**



FORERUNNR 201

GPS/Personal Training Device Designed for athletes as well as recreational walkers or runners. Offers an easy-to-read display, adjustable wristband and integrated GPS sensor to calculate speed, distance and pace. Virtual Partner™ feature allows input of time, distance and pace goals, and then shows if you're ahead or lagging. With GPS navigation capabilities, mark specific locations, look up and navigate to these points, retrace steps or reverse normal route for variety. Garmin provides downloadable performance-tracking software to analyze athletic activity over time. Data can be transferred to a PC, for plotting and analyzing in order to make changes in regimen. Includes wristband, A/C charger with PC interface, manual and quick start guide. 3.3" w x 1.7" h x 0.6" d, 2.75 oz. **\$149.99**



The Meridian™ – Magellan's new premier line of rugged GPS handheld receivers, designed with serious navigators in mind.

MERIDIAN™ GOLD

(left) Expanded memory capacity for downloading maps with optional SD cards in 8, 16, 32 and 64MB • Large backlit display for easy map viewing • Rugged rubber armoring and high impact plastic for use in the harshest environments • Supports several languages including: English, French, German, Swedish, Finnish, Spanish, Italian, Portuguese, Dutch • Save Track-to-Route • Satellite status display • Built-in help • North-Finder with sun/moon positions • Sunrise/set calculator • 16MB database of U.S. cities, interstate/state highways, political boundaries, major waterways and airports • Store 20 routes, 500 waypoints and 2,000 trackpoints • Vertical profile of track and horizontal profile (MapSend™ Topo USA required) • Address search (requires any MapSend software) **\$249.99**



MERIDIAN™ PLAT (right) Meridian™ Platinum Possesses all features of the Meridian Gold and adds electronic compass and barometer that tracks barometric pressure like a weather station **\$349.99**



MERIDIAN™ COL Meridian Color Top of the Meridian line of superior, rugged GPS receivers. Shows location on the industry's first full-color screen in a handheld GPS. Comes preprogrammed with extensive 16MB map, including highways, major roads, parks, navais, waterways, airports and more. • Vivid color, 120 x 160 pixel display • Superior tracking even in dense foliage and urban environments • Rugged design with high-impact housing of wrap-around rubber – it floats! • Infinitely expandable via industry-standard Secure Digital memory cards • Up to 13 hours of continuous battery • Use optional MapSend® CDs to map out trips • Includes 2 AA batteries, PC cable, lanyard • 6.5" h x 2.9" w x 1.2" d, 8.5 oz. **\$399.99**

All SporTracks feature 12-parallel-channel, WAAS receiver • Satellite tracking with advanced Quadrifilar Helix antenna • 2.3" x 1.4" display • Backlit screen and keypad • 500 waypoints • 20 routes • 2000 track points • 76 datums • Indefinite data back-up, stored in non-volatile flash memory • Multi-language • Impact resistant, waterproof case



2 AA's • 5.6" h x 2.2" w x 1.3" d, 6.1 oz. **\$169.99**

SPORTRAK Sporty, GPS system with worldwide database of major cities. Includes worldwide city points-of-interest. • 1 MB built-in memory for additional points • 9 screens: Status, Position, Nav 1, Compass, Nav 2, Plot, Road, Speed, Time • Alarms for proximity, arrival, anchor, cross track, error and GPS • Satellite status • Northfinder sun/moon positions • Sunrise/set, best fish/game calculators • Up to 14 hours use on



SPORTRAK MAP A sporty, pocket-size, GPS system that includes mapping • 2MB database with interstate/state highways, parks, waterways, airports and cities • 4MB memory for downloads • 7 user-configurable screens: Map, Compass, Large Data, Position, Road, Speedometer, Trip Compass • Full 3D topo support • Alarms for proximity, arrival, anchor, XTE and GPS • Save-track-to-route • Satellite status display • Built-in help

• Northfinder sun/moon positions • Sunrise/set, best fish/game calculators • Horizontal profile and address search • PC cable • 2 AA batteries for up to 14 hours • 5.6" h x 2.2" w x 1.3" d, 6.1 oz. **\$199.99**



SPORTRAK PRO Pocket-sized GPS with 32MB memory • 9MB database (interstate/state highways, major roads, parks, waterways, airports, cities, and marine navigation aids) • 23MB memory for downloads • Full 3D topo support • 7 user-configurable screens: Map, Compass, Large Data, Position, Road, Speedometer and Trip Compass • Alarms for proximity, arrival, and anchor • Save-track-to-route • Satellite status display • Built-in help • Northfinder

with sun/moon positions • Sunrise/set, best fish/game calculators • Horizontal profile and address search • PC cable • 2 AA batteries for up to 14 hours • 5.6" h x 2.2" w x 1.3" d, 6.1 oz. **\$269.99**



SPORTRAK COL SportTrak Color Vibrant, high resolution, color screen plus enhanced features in a handheld GPS with 32 MB built-in memory. • 9MB North American basemap (roads, waterways, parks, airports, marine navais, buoys, etc.) • 23MB memory for additional downloads • Accuracy in all orientations – 3-axis electronic compass orients you no matter how you hold it • Built-in barometer • Waterproof

and built tough • Includes 2 AA batteries, PC cable, lanyard • Easily fits in a pocket, 5.6" h x 2.2" w x 1.2" d, 6.8 oz. **\$329.99**

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SINGLE BAND HANDHELDS

The AT-201HP and 401HP are advanced single band HT's with 40 memory channels, programmable band scan, auto repeater offset, frequency or channel display and more. The units have rugged metal cases with backlit keypads and displays. 12V batteries come standard, providing 5W of RF power. • MARS/CAP capable • 40 memories • CTCSS enc/decode • Programmable band and memory scan • DTMF paging • Dual frequency watch • Auto repeater offset • User selectable frequency or channel display modes.

AT-201HP 2M Handheld Transmits: 144-148MHz • Receive range: 130-179MHz • 4.25" h x 2" w x 1.3" d excluding battery pack **\$99.99**

Available Accessories

CHA072 Wall charger for RBP072, CHA120 Wall charger for RBP120/RBP22, PCA145 Cigarette lighter cable, RBP120 12V 700mA NiMH, SD911 Rapid charger, SLC200L 5W carrying case

FREE ITEMS included with some radios.
See Price Guide for details.



SINGLE BAND HANDHELDS

DJ-196T 2M HT 5W output • 135-174MHz rx • 40 multi-function memory channels • MAR/CAP capability • Alpha-numeric display • CTCSS tone encode/ decode and DCS • S-meter • Auto dialer • Cable cloning • PC programming capability • Theft alarm • Experimental insect repel • Back lit keypad • 4.9" h x 2.2" w x 1.6" d, 13.2 oz. **\$139.99**

DJ-296T 222 HT Same as DJ-196T except has a range of 222-225MHz **\$179.99**

DJ-496T 440 HT Same as DJ-196T (above) except has a range of 430-450MHz **\$149.99**

Available Accessories

EB6 Mobile HT bracket, EBP48N 9.6V 700mA 5W NiCad battery, EBP50N 9.6V 700mA 5W NiMH battery, EBP51N 9.6V 1500mAh 5W NiMH battery, EBP56N 7.4V 1000mAh lithium battery, EDC11 Charger for EBP56N, EDC16B Cigarette lighter cable and filter, EDC36 Angle plug power cable with filter, EDC37 13.8V power cable, EDC43 Cigarette lighter cable, EDC88 Rapid charger, EDC97 NiMH quick charger, EDH30 Dry cell battery case, EME12 Headset/earphone/microphone with VOX, EME13 Headset/earbud/microphone with VOX, EME15 Earphone/microphone with VOX, EME17 Boom earphone/microphone, EME20 Tie-pin mic/earphone, EME6 Earphone, EMS47 Speaker microphone with volume control, ERW4 PC cable, ESC36 Soft case for EBP48N



DJ-S40T Pocket-sized UHF HT Covers 420-450MHz, with receiving capabilities beyond the range. 500mW power output - can be increased to 1W by using optional NiMH or external DC supply. • 100 memories • Call channel and several scan modes • Newly designed case that conceals the speaker but provides loud, clear audio • 38 CTCSS enc/decode settings (decode standard) • 4 tone bursts, making it usable for repeaters in many parts of the world • Large, easy-to-read, illuminated display • Experimental "mosquito repelling feature" • Theft alarm function • Cloning capability • Use with crossband transceivers (base or mobile dualband) as a "remote mic" **\$89.99**

Available Accessories

EB6 Mobile HT bracket, EBP52N 3.6V 500mAh NiMH battery, EBP53N 6.0V 500mAh NiMH battery, EBP54N 3.6V 1500mAh NiMH battery, EDC105 Drop-in NiMH charger without power supply, EDC37 13.8V power cable, EDC43 Cigarette lighter cable, EDC93 Wall power supply for EDC105, EDH31 Dry cell battery case, EME12 Headset/earphone/microphone with VOX, EME13 Headset/earbud/microphone with VOX, EME15 Earphone/microphone with VOX, EME17 Boom earphone/microphone, EME20 Tie-pin mic/earphone, EME6 Earphone, EMS47 Speaker microphone with volume control, EMS82 Remote speaker mic, ESC37 Soft case



We accept I.M.P.A.C.® Government Credit Cards

The Xtreme

Communications Xperts!

DM-330MVT

Communications Grade Switching Power Supply

Alinco's Xperts have reinvented the power supply! Xtremely quiet with a patented noise shift circuit, but we'll be surprised if you ever need to use it. It's small, lightweight and powerful! 30A continuous, 32 A peak output, but weighs less than 5 lbs. Variable output from 5 ~ 15 VDC, memory output setting, lighted V/A meter, front panel cigar (10A) and quick-connect (5A) terminals, rear panel high-current connections. Ripple less than 15 mV p-p. *Xtra versatile, use for travel, station or test bench.*



EDX-2 Automatic Wire Antenna Tuner

Xtreme users want to get on the air fast! Ground it, connect a wire and plug it into your rig. Tunes random length wires from 9 ~ 80 feet. Covers 160 ~ 10 meters. (minimum 40 feet of wire needed for use on 160m) Compatible with DX-70 and DX-77 transceivers. Made for indoor/outdoor mounting, use at home, mobile or in the field. Outputs directly to a wire or whip antenna only (no coax output).



DJ-X2000T Multimode Wide Range "Intelligent" Receiver

Monitoring Xcitement is found in the "Intelligent Receiver" from 100 KHz ~ 2150 MHz* with 2000 memory channels, alpha-numeric labeling, receives AM, WFM, NFM, LSB, USB, CW and FM stereo.** On-line "help" feature, 20 scan programs, computer programmable (download free software from Alinco website), Channel Scope™ display, Transweeper™, RF frequency counter, digital sound recorder, CTCSS decode, 2 level attenuator, field strength meter, *instant "flash tune" and many Xtras!*



DJ-X10T Multimode Wide Range Communications Receiver

Xtraordinary reception from 100 KHz ~ 2 GHz* with 1200 memories, alphanumeric display, Channel Scope™ Display, receives WFM, NFM, USB, LSB, AM and CW. Internal HELP feature, seven scan modes, clock with on/off function, "new user" and "eXpert" operating modes, BNC antenna connector, cloning function, *and an Xtensive array of custom settings.*



DJ-X3TD Multimode Wide Range Communications Receiver

Xceptional and unique! Small but powerful. Receives 100 KHz ~ 1.3 GHz*, AM, NFM, WFM, 700 memory channels, dry cell battery pack, four scan modes, stereo FM reception.** *Download free control software from www.alinco.com*

www.alinco.com

* Cellular ported in USA. Undisclosed versions available to qualified users; documentation required. ** Optional stereo headphones required. Specifications subject to change without notice or announcement.



some radios details.



You can do more with Alingo Xtreme Value and Performance.

Xtreme Xcitement!

DJ-V5TH, 2m/440 HT*

Great 2m/440 TX & RX, xtended RX range from 76 ~ 999 MHz, wide band FM, alpha display, 200 memories, CTCSS & DCS encode+decode, 5 watts output, compact size, 4 scan modes, split-band ops, auto-dialer, 13.8 VDC direct input. **Xcellent performer!**



DJ-196T (2m), DJ-296T (222 MHz), DJ-496T (440 MHz) HT

Backlit keys, alpha display, 40 memories, CTCSS and DCS encode+decode, autodial, 13.8 VDC input, and more! High-power battery is standard. **Xtra handy!**



DJ-S40TD 440 MHz HT

Pocket HT features 500 mw output on AA cells, up to 1 watt using an optional NiMH battery. 100 memories, CTCSS encode+decode, SMA antenna, great audio, theft alarm and more! **Xtremely small but packs a punch.**



DJ-C5T 2m+440 "Credit Card" FM HT

Awesome "credit card" size, internal speaker, 50 memories, CTCSS encode+decode, AM airband RX, 300 mw output, soft case, 600 mAh lithium ion battery, includes rapid charger! **This tiny performer Xcells.**



DR-605TQ 2m+440 FM Mobile/Base

Xtra value! 50 watts VHF/35 watts UHF, 51 memories/band, crossband repeat, 430 ~ 449.995 range allows for satellite comms, dual watch. **Check the LOW price!**



DR-135T/TP MKII (2m), DR-435T MKII (440 MHz), DR-235T (222 MHz) Mobile/Base

DR-135 includes AM Airband RX. All models have 100 memories, ignition key on/off, theft alarm, large 7 character alpha display, optional internal TNC can be used for packet or APRS™, 9600 packet mode, front data/GPS input, rear DSUB9 connector, H/M/L power out, autodialer, CTCSS and DCS encode+decode, backlit mic, **Xtra rugged!** Accepts optional digital voice communications board.



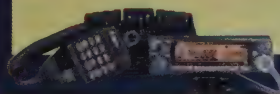
DJ-596T DJ-596T MKII 2m+440 HT

100 memories, alpha channel labels, NiMH battery, CTCSS and DCS encode+decode, WFM-NFM, theft alarm, 6 ~ 16 VDC input, illuminated keys and display, autodialer, full coverage of both bands, Xpanded receive; optional digital voice communications board and more! **Xtend your abilities!**



DR-620T 2m+440 Mobile/Base

Xceptional features! Removable head, speaker faces up or down, changeable color alpha display, 200 memories, H/M/L output, V/U, V/V, U/U, WFM and AM Air Xtended RX, TCXO, theft alarm, **options include TNC or digital voice module, remote mount kit.**



DR-MO6TH 6m/20 watts FM Mobile/Base

"Magic band" Xcitement with local and DX FM contacts, simplex or through repeaters. **Includes CTCSS encode and 100 memories.**



DX-70TH (100w) HF+6m Mobile/Base/Portable

160 ~ 6m Amateur band TX in all modes, Xtra coverage RX from 150 KHz ~ 30 MHz and 50 ~ 54 MHz. Removable face, 100 memories, 2 VFOs, speech compressor, SSB, CW and AM narrow filters, fullbreak-in, multi-function control and MUCH more! **Optional Xcessories include EDX-2 wire antenna tuner & DM-330MVT power supply.**



DX-77T HF Base/Portable

Xcellence at a great price! 160 ~ 10 meter Amateur band TX all modes; 500 KHz ~ 30 MHz general coverage RX. Clean, clear audio, low noise floor from DDS, 100 memories, easy to operate. **Speech compressor, CTCSS encode for 10m FM operation, CW filter.**



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Transceivers intended for use by properly licensed operators. Permit required for MARS/CAP use. Performance specifications only apply to amateur bands. APRS is a registered trademark of Bob B. Wright. Cellular licensed in USA. Unlocked versions available to qualified users, documentation required.



IC-T22A 2M Handheld 3W output @ 13.5 V • 4.0 - 16 VDC input • 136-174MHz rx • Auto low power/power saver (15mA drain) • Remote control microphone (optional HM-75A) • 80 memory channels (40 with alpha display) • VHF/UHF air band receive • Auto repeater function • Backlit display • Die cast aluminum frame and heat sink • 7.2V battery included • **Optional tone scan** • 2.3" w x 4.3" h x 1.1" d, 10.9 oz..... **\$199.99**

Available Accessories

AD56 Battery pack adapter/rapid charger, BC119N11 NiCad/NiMH desk charger, BP170 Battery case, BP172 950mAh 4.8V battery, BP173 600mAh 9.6V battery, BP180 600mAh 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, HM128 Earphone + mic, HM131 Speaker/mic/earphone jack/clip, HM46 Slim-line speaker mic, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, HS94 Earpiece headset, LC125 Case for T22A with BP170/171/72, MB30 Mobile or wall bracket, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, SP13 Earphone, VS1 VOX-PTT unit for HS94



IC-V8 2M FM HT ICOM's first amateur 2M handheld radio with CTCSS/DTCS enc/decode with tone scan. You will not find a 2M HT that is easier to use. • Retro design • 144-148MHz • Full 5.5W output (standard battery) • Acoustical design for the best audio • 100 alphanumeric memories with easy recall • Scans 40 channels/second • Zoom through personalized scan ranges • Customize operation using up/down and rotary controls • Designed for any size hand with full-sized keypad for larger fingers • Drop-in trickle charger included, which operates from

12VDC either in home or car; charge battery in radio or alone • Use a PC to set-up operating parameters • Durable green polycarbonate front panel and aluminum diecast chassis built to military specs • 2.125" w x 5.188" h x 1.375" d, 12.3 oz... **\$124.99**

Available Accessories

AD101 Battery adapter for BP211 and BC119N01, AD941 Adapter cup for BC119N01, BC119N01 Desk charger, BC14401 Desk charger with adapter, BP208 Battery case, BP209 7.2V 1100mAh 5.5W battery, BP210 7.2V 1650mAh 5.5W battery, BP211 7.4V 1600mAh Lith ion battery, BP222 7.2V 600mAh 5.5W battery, CP17L Right angle cigarette cable for charger, CSV8 Cloning software, HM128L Right angle plug for earphone or mic, HM131L Right angle plug for speaker/mic/earjack/clip, HM46L Slim-line speaker mic with right angle plug, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS15 Headset/VOX, HS94 Earpiece headset, LCF3GSWIVEL Leather case with swivel, MB68 Extra standard belt clip, MB74 Spring loaded belt clip, MB87 Swivel belt clip, OPC474 Radio-to-radio cable, OPC478 PC cable, OPC478U PC USB cable, OPC515L Right angle DC cable for charger, SP13 Earphone, UT108 DTMF decode unit, VS1L Right angle VOX-PTT unit for HS94



IC-T7H 2M/440MHz Dual Band HT 5W with standard battery (9.6V/650mAh) • Up to 6W @ 13.5V DC (optional DC power cable required) • TX 144-148 MHz, 440-450MHz; RX 118-174 MHz, 400-470MHz • 250mW+ audio output • One-touch band switching • Priority watch • 70 memories (9 DTMF, for auto dialing) • CTCSS tone encode/decode • 50 independently programmable tone frequencies • Auto power save and repeater function • Auto OFF • Thumb-touch lock settings • Internal

guide • Backlit LCD • Wall charger • Programmable • 2.3" w x 4.8" h x 1.1" d, 14.3 oz..... **\$179.99**

Available Accessories

AD56 Battery pack adapter/rapid charger, BC119N11 NiCad/NiMH desk charger, BP170 Battery case, BP172 950mAh 4.8V battery, BP173 600mAh 9.6V battery, BP180 600mAh 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, CS7 DOS programming software, CSWHH4 Windows software with cable, FA1443B 2M/440 duck, HM128 Earphone + mic, HM131 Speaker/mic/earphone jack/clip, HM46 Slim-line speaker mic, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, HS94 Earpiece headset, LC136 Case for T7H with BP170/171/172, LC137 Case for T7H with BP173/180, MB30 Mobile or wall bracket, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, OPC478 PC cable, SP13 Earphone, VS1 VOX-PTT unit for HS94



IC-W32A 2M/440MHz Dual Band HT 5W output @ 13.5V DC • 144-148, 440-450 transmit; 118-174, 400-470 receive • 200 memories • 8-character alphanumeric memory identification • Keypad entry • Backlit display and keypad • HT-to-HT cloning capability or PC programming capability (optional accessories required) • Independent tuning and volume band controls • VHF/UHF ex-change function allows assignment of VHF/UHF band controls to either knob • Meets MILSPEC C/D/E for shock and vibration • 2.25" w x 5.5" h x 1.4" d, 16 oz..... **\$259.99**

Available Accessories

AD51 Battery pack adapter/rapid charger, BC119N11 NiCad/NiMH desk charger, BP170 Battery case, BP172 950mAh 4.8V battery, BP173 600mAh 9.6V battery, BP180 600mAh 7.2V battery, CP12 Cigarette cable with filter, CP12L Right angle cigarette cable with filter, CSWHH4 Windows software with cable, CSW32 DOS programming software, FA1443B 2M/440 duck, HM128 Earphone + mic, HM131 Speaker/mic/earphone jack/clip, HM46 Slim-line speaker mic, HM54 Heavy-duty speaker mic, HM75A Remote control mic, HS10 Boom mic/headset, HS10SA VOX unit, HS10SB PTT switchbox, HS85 Headset with VOX, HS94 Earpiece headset, LC128 Carrying case, MB30 Mobile or wall brkt, NCP1 Nylon chest pack, OPC254 Mini DC power cable, OPC254L Right angle mini DC power cable, OPC474 Radio-to-radio cable, OPC478 PC cable, SP13 Earphone, VS1 VOX-PTT unit for HS94



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MULTI BAND HANDHELS

IC-T90A 6M/2M/70cm FM Handheld Palm-sized, simple to operate, and designed with a die-cast aluminum chassis. New MOSFET technology, along with a 7.4V Lithium-ion battery, produces a full 5W. Wideband receive covers 495 kHz to 999.990MHz (cellular blocked), AM, FM or WFM modes. Unique WX Alert feature constantly checks local active weather station for alert tone. If alert occurs, the HT automatically switches to the WX channel and beeps. Scanning management with 555 alphanumeric memories (500 regular, 50 scan edges, and 5 call channels). Dynamic Memory Scan allows choosing any of 450 memories to scan, and, with its soft partitioning, setting up a maximum of 18 banks or 100 channels/bank. Pre-programmed with TV station frequencies! Over-sized buttons for easy operation. Optional PC software for memory, alphanumeric, scan list and parameter customizing. • 2.8" w x 3.4" h x 1.16" d, 8.47 oz..... **\$259.99**



Available Accessories

AD925MA SMA - BNC adapter, BC139 Desk rapid charger, BP216 Battery case, BP217 7.4V 1300mAh Lith-ion, CP19R Cigarette cable with filter, CST90A Windows cloning software, HM128 Earphone + mic, HM131 Speaker/mic/earphone jack/clip, HM46 Slim-line speaker mic, HM75A Remote control mic, HS85 Headset with VOX, HS94 Earpiece headset, LC152A Carry case, MB83 Swivel belt clip, OPC474 Radio-to-radio cable, OPC478 PC cable, OPC478U PC USB cable, SP13 Earphone, VS1 VOX-PTT unit for HS94

KENWOOD

SINGLE BAND HANDHELD

TH-22ATH 2M FM Handheld This is a super-compact and lightweight transceiver with impressive performance. EZ to use menu system. Palm-sized, sharply styled, easily slips into pocket. • 5W output from MOS FET power module and standard PB-34 NiCad battery • 136-174 receive • RF output control (Hi/Low/EL) • 144-148 MHz coverage • 40 memory channels stored in EPROM (plus 1 call channel) • Auto repeater offset • Multi scan functions (VFO, call and memory) • Dual Scan stop modes (CO and TO) • CTCSS encode • DTSS and page • Luminescent keypad and LCD with backlighting • Built-in DTMF keyboard • 5 DTMF memories • Tone alert • Selectable squelch configuration • Busy channel lock out • Battery voltage indicator • Drop-in desktop charger • 2.1" w x 6.1" h x 1.12" d, 11 oz..... **Closeout \$199.99**



Available Accessories

BT9 Four "AA" battery holder, EMC3 Label clip mic/earphone, FM33 VOX/boom mic headset, KSC14 2 pack rapid charger, KSC8A Drop-in charger, PB33 1200mAh 6V battery, PB34 600mAh 9.6V 5W battery, PG2W DC cable, PG3J Cigarette cord with filter, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, TSU8 CTCSS decoder, WR2 Water resistant bag

TH-K2AT 2M FM HT • 5W RF output • 100 memories with 6-character names • Large LCD panel and backlit keys • Internal VOX • Weather alert/RX (US only) • Automatic simplex checker • Auto repeater offset • Multiple scanning functions • Priority scan • Built-in 42-tone CTCSS and 104-code DCS • DTMF encode • Automatic simplex check • Memory channel transfer • Time-out timer • Auto power off • Meets MIL-STD-810 standards for resistance to rain, vibration, shock and humidity • PC programming capability • 4" high-gain antenna • Charges 3X faster than previous models with high-capacity NiMH..... **\$159.99**

Available Accessories

BT14 Six "AA" battery holder, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, KHS21 Boom mic headset, KSC24 Rapid charger, PB43N 1100mAh 7.2V NiMH battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4Y Programming cable, SC54 Soft case, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, WR2 Water resistant bag



TH-G71A Dual Band FM HT Its ergonomic design, illuminated and back lit display all combine to make operation a breeze. The EZ to use menu system gives full control over all operating settings. • 6W (VHF), 5.5W (UHF) @ 13.8V DC • 2M: 144-148 tx/rx and 118-174MHz extended receive including Aircraft, 440MHz: 430-450MHz tx and 400-470 MHz rx • 200 multi-function memory channels • Memory name function • Multiple scan modes • CTCSS tone scan • DTMF memory (10 channels) • DTMF remote control • Function key lock • Auto battery saver circuit • Auto power-off • Time-out timer • PC ready • High performance antenna • TM-V7A remote control • MIL-STD 810E approved • 2.3" w x 4.4" h x 1.3" d, 11.6 oz..... **\$229.99**

Available Accessories

BC19 Rapid charger, BT11 Four "AA" battery holder, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, J29063113 Belt clip, PB39 600mAh 9.6V SW battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4P PC control cable, SC45 Soft case for G71A with PB38/39, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, WR2 Water resistant bag



SINGLE BAND HTS

VX-150 2M Ultra-Rugged FM HT Designed to perform under the most difficult conditions. Packed with leading edge features. Die-cast aluminum case • High output speaker • Illuminated keypad and OmniGlow™ • 5W with standard battery • Three power output levels • 144-148 MHz tx, 140-147MHz rx • 209 memories • Smart-Search™ auto memory loading • Keypad with 16 multi-function keys • Two user-definable function keys • Priority monitoring • Dual watch • Alphanumeric recall • Memory bank and preferential memory scanning • VFO search • Auto repeater shift • ARTS™ • Wide and narrow deviation selection • 1750Hz tone calling • Programmable menu • Battery saver and auto power off • MIL-STD 810D/E rating • 4.2" h x 2.3" w x 1.1" d, 11.5 oz..... **\$119.99**

Available Accessories

ADMS1F Programming software, CN3 BNC-SMA adapter, CT27 Cloning cable, CT44 2-pin speaker mic adapter, CT53 Packet cable, EDC5B DC adapter/filter, EDC6 DC adapter; plug/wire only, FBA25 6 "AA" cell battery case, FNBV57 7.2V 1100mAh battery, FNB64 7.2V 700mAh battery, LCC150/TT Leather case, LCC150S/TT Leather case/swivel, MH34B4B Speaker mic, MH37A4B Earpiece and mic, NC72B Extra wall charger, VAC400B One-hour rapid charger, VC25 VOX headset

DUAL BAND HANDHELDS

FT-50RD/41B Ultra Compact Dual Band VHF/UHF HT High performance, heavy-duty, rugged, state-of-the-art and small enough to put in a pocket. Simple to operate, with all the features you want. • Power output 5/2.8/1 0/0.1W • Transmit: 144-148MHz and 430-450MHz • RX: 76-200, 300-540, 590-999MHz (cell blocked), includes AM aircraft receive, FM narrow and wide • 3 selectable filters • Digital Code Squelch • CTCSS en/decode • 112 memories plus 2 home channels • High speed scanning • 48-character alphanumeric display • ARTS™ • Dual watch • Digital voice recorder • Windows™ PC programmable • Rear mount battery • MIL-STD 810D/E rating • 3.9" h x 2.25" w x 1.2" d, 11.5 oz..... **\$209.99**

Available Accessories

ADMS1E Software, CA14 Two charging sleeves, CA15 Charging stand for NC60B, CLIP10 Spring loaded belt clip, CN3 BNC-SMA adapter, CSCI10 Cordura case, CSCI6 Case for unit with FNB41/FBA15, CT27 Cloning cable/CT27A, CT53 Packet cable, EDC5B DC adapter/filter, EDC6 DC adapter; plug/wire only, FBA15 4 AA battery holder, FBA21 6 AA battery holder, FEPI10 Earphone, FNBV47 7.2V 1100mAh battery with belt clip, FNB41 9.6V 600mAh 5W battery, LCC10C Leather case with clip for unit with FNB41/V47, LCC10S Leather case with sleeve for unit with FNB41/V47, MH34B4B Speaker mic, MH37A4B Earpiece and mic, NC50 One-hour dual slot charger, NC60B Wall charger, PA17 Battery cable extender, VC25 VOX headset



DUAL BAND HANDHELDS

TH-D7A(G) 2M/440MHz Dual Band Data Communicator Equipped with a built-in TNC for simple packet operation or with a GPS as a full function APRS™. Reports position, speed and heading as well as calculation of distance to destination. Also use for APRS™ messaging – send up to 45 characters without a PC. Advanced functions possible with the VC-H1 • 5.5W @ 13.6V DC • 2M: 144-148MHz tx, 118-174MHz rx • 440MHz: 430-450MHz tx, 400-480MHz rx • 1200/9600 baud TNC • Station list stores data in up to 40 memory channels • Grid square locator display • Dual receive on same band for voice and data (VHF only) • 200 memories • PC programmable for frequency and name (PG-4W required) • 16 backlit keys • CTCSS encode/decode • MIL-SPEC 810C/D/E water resistant • 10 channel DTMF phone and auto patch memories • TM-V7A and TM-742D DTMF remote • Altitude • Time • 3-position memory • 3-memory text • Position ambiguity • Audible emergency signal • Auto message response • Data band settings • 1750MHz packet burst • 4.75" h x 2.25" w x 1.5" d, 12 oz **\$359.99**

Available Accessories

BC19 Rapid charger, BT11 Four "AA" battery holder, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, J29063113 Belt clip, PB39 600mAh 9.6V SW battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4V VCH1 connector cable, PG4W PC software and cable, SC47B Black soft case, SC47OR Orange soft case, SMC32 Mini right angle speaker mic, SMC33 Speaker mic with remote control, SMC34 Speaker mic with volume function keys, WR2 Water resistant bag



Used & Demo Equipment lists

Updated regularly on the web. Check them out and order **On-line**

TRIBAND HANDHELD

TH-F6A FM Triband HT Covers 144/220 and 440MHz plus 0.1-1300 cell blocked (including Aircraft receive). • Dual channel receive capability • FM/FM-W/FM-N/AM plus SSB/CW receive • Ferrite bar antenna for receiving AM • Weather channel RX mode • 435 memories (8 groups of 50 channels) • 3 call channels plus 20 for programmable scan • Multiple scan functions • 7.4V 1550 mAh lithium-ion battery for 5W and extended operation • 16-key backlit pad plus multi-scroll key • Built-in charging circuitry – battery recharges while unit operates form a DC supply • Built-in CTCSS enc/decode/DCS • Large 8-character alphanumeric display • Wire-less remote control • Battery indicator • Internal VOX • MCP programming software via web (using PG-4P) • Meets MIL-STD 810 C/D/E for resistance to vibration, shock and light rain • 3.438" h x 2.313" w x 1.188" d, 8.8 oz (with battery)..... **\$329.99**

Available Accessories

BT13 AA battery case, EMC3 Lapel clip mic/earphone PC, HMC3 VOX/boom mic headset, KHS21 Boom mic headset, PB42L 1550mAh 7.4V lith-ion battery, PG2W DC cable, PG3J Cigarette cord with filter, PG4P PC control cable, SC51 Softcase with swivel belt clip, SMC32 Mini right angle speaker mic, SMC33 Spker mic with remote control, SMC34 Spker mic with volume function keys, WR2 Water resistant bag





VX-1R Ultra Compact Dual Band HT Provides superb local communications at power levels of 1W or 500mW. Impressive memory and scanning capabilities in addition to wideband receive which includes VHF and UHF TV audio. AM broadcast, FM broadcast, AM aircraft band, and public safety channels.

- Receive ranges: 0.5-1.7MHz (BC Band) 76-108MHz (FM)
- 108-137 (AIR) 137-170 (VHF HAM)
- 170-222MHz (VHF TV)
- 222-450MHz
- 470-800MHz (UHF TV)
- 800-999MHz • Cell blocked
- Transmit ranges: 144-148 MHz • 430-450MHz • 500

mW with standard 3.6V lithium-ion battery (1W at 6V DC) • 291 memory channels • SmartSearch™ • CTCSS enc/decode, digital coded squelch • Backlit keypad • ARTS™ • One-touch emergency system • PC programmable • 6-digit alphanumeric memory labels • 3.2" x 1.9" w x 1.4", 4 oz **C/O \$129.99**

Available Accessories

ADMS1E Windows software, CN3 BNC-SMA adapter, CSC71 Soft case, CT44 2-pin speaker mic adapter, CT53 Packet cable, EDC15 DC adapter, FBA20 Battery holder, FEP10 Earphone, FNB52L1 3.6V 700mAh lithium-ion battery, MH34B4B Speaker mic, MH37A4B Earpiece and microphone, NC66B Two-hour charger, VC25 VOX headset

FREE ITEMS included with some radios.
See Price Guide for details.



VX-2R Ultra-compact 144/430MHz Dualband FM Handheld Transceiver Slightly smaller in total size than the 1R, the 2R is housed in a rugged, aluminum, die-cast case. Powered by a slim-line 1 amp-hour Li-ion battery pack, yielding 1.5W output on 2M, and 1W on 70cm. With external DC power applied (optional), power increases to 3/2W (2M/70cm). The 2R includes wide receiver coverage from 500kHz to 999MHz (cellular blocked) on AM and FM modes. Over 1300 memories, special bands for shortwave broadcast, marine band, and NOAA weather ("Severe Weather Alert" included), CTCSS/DCS with "split tone" capability, a WIRES™ internet key and DTMF auto-dialer. Outstanding audio. • Dual-channel "priority" operation • VOX (optional) • RF squelch • Channel counter searches for frequency of strong nearby station • Automatic Repeater Shift • ARTS™ • Busy channel lock-out • DC voltage meter • Wide/narrow deviation setting • Cloning, for quick transfer of programming data • 1750Hz tone (European repeater) • 1.89" w x 3.19" h x 0.91" d, 4.7 oz..... **\$179.99**

Available Accessories

CN3 BNC-SMA adapter, CSC90 Soft case, CT127 Cloning cable, CT44 2-pin speaker mic adapter, EDC21 DC adapter, FNB82L1 3.7V 1000mAh lithium-ion battery, MH34B4B Speaker mic, MH37A4B Earpiece and microphone, VC25 VOX headset

TRIBAND HANDHELDS



VX-5R Tri-Band HT A miniature FM transceiver with extensive frequency coverage of 2M, 6M, 440MHz (including AM and FM broadcast), HF shortwave up to 16MHz and VHF AM aircraft. Super thin profile and durable lightweight design. • 5W (4.5W 430MHz) with standard lithium-ion battery • 50-54, 144-148 and 430-450MHz • tx, .5-15.995, 48- 728.990 and 800-998.990MHz wideband rx (cell blocked) • 220 memories plus home channels • 10 auto-scan weather channels • CTCSS enc/decode, DCS • Backlit keypad • ARTS™ • 8-character, alphanumeric • Time-out timer • Dual watch • Dot matrix LCD Smart search spectrum analyzer • Temperature display read-out • Barometric pressure sensor option • Automatic power-off • Windows PC programmable • 16-digit 9-memory DTMF autodialer • Busy channel lock out • Multi-section antenna • Aluminum diecast case • MIL-STD 810 rating • 3.4" h x 2.3" w x 1.1" d, 8.9 oz..... **\$219.99**

VX-5RS Same radio as the VX-5R above with a silver case..... **\$219.99**

Available Accessories

ADMS1E Windows software, CD15A Charger stand for NC72B, CN3 BNC-SMA adapter, CSC73 Soft case, CT127 Cloning cable, CT44 2-pin speaker mic adapter, CT53 Packet cable, EDC5B DC adapter/filter, EDC6 DC adapter/plug/wire only, FBA23 2 "AA" cell battery case, FNB58L1 7.2V 1100 mAh lithium-ion battery, FNB80L1 7.4V 1300mAh lithium-ion, MH34B4B Speaker mic, MH37A4B Earpiece and mic, NC72B Extra wall charger, SUI Altitude/barometric pressure sensor, VC25 VOX headset



VX-7R Ultra-Rugged, Submersible Magnesium FM Triband HT With a full 5W output on 50, 144 and 430MHz FM, the 5R also offers bonus coverage on 222MHz FM band at 300mW. The rugged design allows the unit to be submersible at 3' for 1/2 an hour and it sports rubber bumpers, all for JIS-7 specification protection. • 500kHz to 999MHz continuous receive (cellular blocked) • Four simultaneous dual receive modes • Over 900 memories including 40 memory scan band limit, 10 home channels and 10 weather • Built-in CTCSS/DCS enc/decode • "Split Tone" capability • Auto-Range Transponding System • Easy-to-read display with graphical and pictorial tones - user-changeable icons and fonts • Full-color strobe LED • Spectrum scope display • 24-hour clock • On/Off timers • Internet key for instant access to WIRES™ internet-linking • "Quick-Draw" swivel-mount belt clip • 7.4V 1300mAh lithium-ion battery • Choose black or silver • 2.4" w x 3.5" h x 1.1" d, 9.2 oz..... **\$309.99**

VX-7RB Same radio as the above VX-7R with a black case..... **\$309.99**

Available Accessories

ADMS1G Programming software, CD15A Rapid charger for NC72B, CMP460A Waterproof speaker/mic, CN3 BNC-SMA adapter, CSC88 Soft case, CT91 Microphone adapter, EDC5B DC adapter/filter, EDC6 DC adapter/plug/wire only, FBA23 2 "AA" cell battery case, FNB80L1 7.4V 1300mAh lithium-ion, MH57A4B Speaker/mic, NC72B Wall charger, SUI Altitude/barometric pressure sensor, VC27 Earpiece/mic

ALINCO
AMATEUR RADIO'S VALUE LEADER™



HF RADIOS

DX-70TH Compact HF Covers 160-6M • 150kHz-30MHz and 50-54MHz receive • SSB, CW, AM, FM • 100W (AM 40W) • Detachable face • 100 multi-function memories • Two VFOs • Easy split operation mode • Multi-function control • Narrow filter • Noise blanker • Speech processor • CTCSS for 10M and 6M repeaters • Full, semi or auto break-in CW • All mode squelch • General coverage receiver • Quick offset • Two scan modes • Separate antenna terminals for HF and 6M • RIT • TXIT • Selectable AGC • RF gain control • Dial lock • Automatic antenna tuner interface • MARS/CAP capability • 2.25" h x 7" w x 9" d, 8.3 lbs..... **\$699.99**

Available Accessories

DM330MVT 30 amp switching power supply with meter, EBC8 Front control head bracket, EBC9 Extra mobile bracket, ED54 5' remote mount optional cable kit, ED55 5' mic extension cable, ED56 15' remote cable, EDX2 160-10M auto wire tuner, EMS14 Desk mic, PC25 DC cable



DX-77T 160-10M • 500kHz-30MHz general rx • SSB/CW/AM/FM • 100W (AM 40W) • 100 multi-function memories • Two VFOs • PC control via optional cable and software • Direct digital synthesis • Easy split operation mode • Multi-function control • CW narrow filters • Noise blanker • 6-50 WPM electric keyer • Full, semi or auto break-in CW • All mode squelch • Quick offset • Two scan modes • RIT • High/low power setting control • Selectable AGC • RF gain control (RX) • Dial lock • Auto antenna tuner interface • Industry-standard power input plug • MARS/ CAP capability • Requires 13.8V DC @ 20A • 3.6" h x 9.5" w x 9" d, 8.3 lbs. **\$669.99**

Available Accessories

DM330MVT 30 amp switching power supply with meter, ED55 5' mic extension cable, EDX2 160-10M auto wire tuner, EMS14 Desk top microphone, PC25 DC cable

Look For This

NEW

& Check Out AES' Latest Additions.

IC-2200H
2M Digital Mobile



A digital wolf in sheep's clothing.

Icom's new IC-2200H. Not your ordinary 2M mobile. This powerhouse growls with the best in rugged, traditional 2M operation combined with optional low-band digital for voice and data communication. Similar in appearance to the '2100H, this alpha wolf shares the same basic panel layout as its domesticated kin, but has a newly designed MOS-FET power amplifier to generate a stable, heart-stopping 65W of output power, selectable in four steps — 65/25/10/5W. Add the optional UT-115 digital unit and get digital voice and data, callsign memory, and position exchange — when connected to an external GPS receiver. Want more? Experts confirm the best place to start hunting would be at AES.

65W Output Power • Get your signal out! A newly designed MOS-FET power amplifier provides a stable, dependable 65W — selectable in four steps, 65/25/10/5W.

Wideband VHF Receive with Weather Alert • 118-174MHz. Enough coverage for your public safety needs! Weather alert to keep you on top of any weather emergencies.

Digital Operation (optional) • With the optional UT-115, get crystal clear digital audio & data, callsign memory with up to 20 character message, and position exchange (when connected to an external GPS receiver), allowing you to exchange position information.

Simple Operation • The '2200H retains the same basic panel layout and user interface as the '2100H. Large tuning dial provides easy access so you can keep your eyes on the road.

Rugged Construction • Durable, one piece aluminum diecast construction provides dependable operation — even in harsh environments!

Enhanced APRS • Now you can use a single channel for voice and data! APRS® or other new software operations can now be utilized while a conversation is underway.

207 Memory Channels • including one call channel and six scan edges, all with six character alphanumeric channel naming

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ICOM

val·ue (v l yoō) n from L. valuta, worthy

1. a fair return in money or another medium of exchange for something. *"My Icom dual band mobile radio was well worth the money, a great value."*



Fig. 1
IC-2720H

<positive value for the money> <the value of unimpaired communications during an emergency>

4. **a.** a numerical quantity that is assigned or is determined by calculation or measurement <the value of x> *"If I have ten Icom dual band mobile radios, and I take away four, I am in extreme sorrow, and I am left with a value of six Icoms – which is still a hundred times better than any other radio, let me tell you!"* **b.** precise signification <the word value of something> *"My Icom dual band mobile radio is beyond measurable value when it comes to emergency preparedness."*



Fig. 2
IC-208H

2. the exact monetary worth of something. *"My Icom dual band amateur radio is a great value especially since the remote head cable comes standard; a savings of over \$50.00".*
3. the relative worth, importance, or usefulness of something to somebody. *"My Icom dual band radio is invaluable to our local emergency communications preparedness".*

5. **a.** the real or perceived duration of time a musical note is held. *"The clarity of sound my Icom dual band mobile gives is music to my ears."* **b.** the written representation of the quality of tone or a spoken sound. *"My Icom IC-208H has 2 Watts of audio output."*

6. **a.** the lightness or darkness of a color: LUMINOSITY **b.** the relation of one part in a picture to another with respect to lightness

and darkness *"The amber value of my Icom's LCD display is adjustable to the environmental needs, and is perfect to see day or night."*

7. something (as a principle or quality) intrinsically valuable or desirable <sought material values instead of human values> *"I value my Icom dual band mobile radios above any other."* value verb

Inflected Form(s):

val·ued; val·uing; got to have one

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Icom means value!

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ICOM



DUAL BAND BASE STATION

IC-910H VHF/UHF All-Mode With optional 1200 MHz installed, it becomes an SSB/CW/FM tribander. • 144-148, 430-450 and 1240-1300MHz (option) • 99 regular memories, 1 call, 6 scan edges per band, 10 satellite • 5-100W (2m), 5-75W (440MHz) • 3.5" multi-function LCD, 10-key direct entry keypad • Satellite mode support • Simultaneously works 2 bands in receive and full duplex • CW full support • Versatile scan functions • Memory pad • 50 tone CTCSS encode • Speech compressor • One-touch & auto repeater • IF shift • VOX • Requires 13.8V DC @ 23A • 9.5" w x 3.6" h x 9.4" d, 10 lbs... **\$1099.99**

Available Accessories

AG1200 1.2GHz mast mount preamp, AG2400 2.4GHz mast mount down conv., AG25 2M mast mount preamp, AG35 430 mast mount preamp, CR293 High stability crystal unit, CT17 Level converter, FL132 500Hz main receiver CW filter, FL133 500Hz sub-band receiver CW filter, MB23 Carrying handle, MB5 Mobile mount, PS125 25A switching power supply, SM20 Stand mic for base station, SP10 Slim-line external speaker, SP7 Small external speaker, UT102 Voice synthesizer, UT106 DSP unit, UX910 10W 1.2GHz module



HF RADIOS

IC-703 HF QRP Transceiver Versatile – for home, shack, mobile DX'ing and in the field. Covers 160-10M and, depending on power supply, capable of 5W @ 9.6VDC (10W @ 13.8VDC). Similar to the IC-706 series, but without VHF/UHF. Offers a built-in, relay-type automatic antenna tuner (50Ω antennas). • USB/LSB/CW/RTTY/AM/ FM • 105 memories • 10W output max., adjustable steps (5W with 9.6V batteries) • Memory keyer function • Large capacity external battery pack and antenna options • 6.563" w x 2.28" h x 4.875" d, 4.4 lbs..... **\$619.99**

IC-703 PLUS Same as above, plus 6M. **\$649.99**

Available Accessories

AH2B Whip with mount, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, AH703 40/20/15/10/6 20W 4.6' antenna, BC155A Battery charger/BP228, BP228 9.6V 2800mAh external NiCad, CT17 Level converter, FL222 1.9kHz 455kHz IF SSB filter, FL257 3.3kHz 455kHz IF SSB filter, FL52A 500Hz 455kHz IF CW filter, FL53A 250Hz 455kHz IF CW filter, HM118TN TTP mic, LC156 Back pack carrying case, MB62 Mounting bracket for main unit, MB63 Mounting bracket for control panel, MB65 Mounting base platform, MB72 Carrying handle, OPC1229 Extra DC cord, OPC581 11.5' separation cable, OPC587 16' separation cable, OPC589 8-pin jack adapter cable, OPC599 7-8 pin-13 pin adapter, OPC742 13-pin cable, RMK706 Remote mount kit, SM20 Stand mic for base station, SM6 Electret desk mic, SP10 Slim-line external speaker, SP7 Small external speaker, UT102 Voice synthesizer



IC-706 MK II-G Compact HF/VHF/UHF All Mode Base station performance in a mobile size. Coverage 160-10M + 6M, 2M and 70cm • 0.03-200 MHz broadband receive with wide AM and FM broadcast • 100W (40W AM) from 160-6M, 50W (40W AM) on 2M, 20W (8W AM) on 70cm • RTTY • PSK31 • Speech compressor • 107 alphanumeric memories • Detachable control panel • 2 filter slots • AF-DSP • Tone encode, scan and squelch • Cross band split • Noise blanker • IF shift • Preamp/attenuator • CW keyer • CW pitch control/reverse • Full break-in • VOX • Simple bandscope • SWR graphic sweep • One-button duplex and auto repeater • 2 antenna connectors • Requires 13.8V DC @ 20A • 6.6" w x 2.3" h x 7.9" d, 5.5 lbs **\$769.99**

Available Accessories

BET706TUNECONT Better RF IC706 tune control, AH2B Whip with mount, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, AT180 HF-6M auto coax antenna tuner, CR282 Stability crystal, CT17 Level converter, FL100 500Hz 9MHz IF CW filter, FL101 250Hz 9MHz IF CW filter, FL103 2.8kHz 9MHz IF SSB filter, FL223 1.9kHz 9MHz IF SSB filter, FL232 350Hz 9MHz IF CW/RTTY filter, HM118TN TTP microphone, LC156 Back pack carrying case, MB62 Mounting bracket for main unit, MB63 Mounting bracket for control panel, MB65 Mounting base platform, MB72 Carrying handle, OPC205D DC cord, OPC581 11.5' separation cable, OPC587 16' separation cable, OPC589 8-pin jack adapter cable, OPC598 23' extension cable for AT180, OPC599 7-8 pin-13 pin adapter, OPC742 13-pin cable, PS125 25A switching power supply, RMK706 Remote mounting kit, SM20 Stand mic for base station, SM6 Electret desk mic, SP10 Slim-line external speaker, SP7 Small external speaker, UT102 Voice synthesizer



IC-718 HF All Band Transceiver Advanced features, yet easy to use. Simplified operation, perfect for beginners or as a backup rig. • Covers 160-10M • Continuous receive 0.03-30MHz • 100W (40W AM) • Built-in USB, LSB, CW, RTTY (FSK) and AM • 101 memories • Variety of scan functions • Front mounted speaker • IF shift • Mic compressor • RF gain control • Noise blanker • RF attenuator and preamp • Auto notch • Ample CW (electronic keyer) • VOX • Flexible filter selection • Digital S/R meter • High frequency stability • Hand mic included • Requires 13.8VDC @ 20A • 9.4" w x 3.75" h x 9.4" d, 8.5 lb **\$569.99**

Available Accessories

BET706TUNECONT Better RF IC706/718 tune control, AH2B Whip with mount, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, AT180 HF-6M auto coax antenna tuner, CR338 High stability crystal, CT17 Level converter, FL222 1.9kHz 455kHz IF SSB filter, FL257 3.3kHz 455kHz IF SSB filter, FL52A 500Hz 455kHz IF CW filter, FL53A 250Hz 455kHz IF CW filter, FL96 2.8kHz 455kHz IF SSB filter, MB23 Carrying handle, MB5 Mobile mount, OPC205D DC cable, OPC598 23' extension cable for AT180, PS125 25A switching power supply, SM20 Stand mic for base station, SM6 Electret desk mic, SP20 Speaker with audio filter, SP21 Speaker, SP7 Small external speaker, UT102 Voice synthesizer, UT106 DSP unit



IC-746PRO HF/VHF All Mode Transceiver 160-10M + 6M + 2M • Continuous receive 0.03-60MHz, 108-174MHz • 100W (40W AM) • 32-bit floating DSP and 24-bit AD/DA converter • AGC loop management • IF filter width and shape variable • All mode signal mod/demodulation • RTTY demodulator and decoder • Digital twin PBT capability • 100 memories (10 "memo pad") • PSK-31 • Auto tuner • 2 antenna connectors for HF/6M • IF-DSP noise reduction, auto notch and selectable audio peak filters • Noise blanker • Spectrum scope • Twin pass-band tuning • Triple band stacking register • 2-step preamp • RF speech compressor • Tone squelch/scan • VOX • SmartTune™ variable speed tuning • Auto repeater duplex • CW pitch control • QSO serial number generator • Transmit audio monitor • Up/down frequency mic • Requires 13.8V DC @ 20A • 11.3" w x 4.7" h x 12.5" d, 19.6 lbs **\$1379.99**

Available Accessories

BETIMATE Better RF accessory, AH2B Whip with mount, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, CR338 High stability crystal unit, CT17 Level converter, HM36 Scanning hand mic, OPC205D DC cable, PS125 25A switching power supply, SM20 Stand mic for base station, SM6 Electret desk mic, SP20 Spkr with audio filter, SP21 Speaker, UT102 Voice synthesizer

FREE ITEMS included with some radios.
See Price Guide for details.



IC-756PRO II HF/50MHz All Mode Transceiver 32 bit floating DSP digital IF filter with 41 selectable bandwidths, microphone equalizer, manual notch function, TFT 5" color LCD (selectable colors/schemes), digital twin passband tuning, and PSK31. • Continuous 0.03-60MHz rx • 100W (AM 75W) • 101 memories • AGC loop management • RF speech compressor • Twin peak audio filter • DPSN • RTTY demodulator • Digital noise reduction • CW wave form • Spectrum scope • Digital voice memories • Memory keyer and pad • Analog and digital meters • Complete CW features • Dual watch • Triple band stacking register • Quick split function • Antenna tuner • RIT and ATX control for main and sub-band • Dual antenna system • VOX • 2-level preamp and 3-level attenuator • Auto TS function • Scanning functions • CTCSS tone encoder • Noise blanker level control • Lower band scope floor noise level • DVR (band scope enabled) • Independent digital and voice mode settings • Disable compression in digital modes • 1/4 tuning steps in digital modes • SSB/CW synchronous tuning • 13.3" w 4.3" h x 11.2" d, 21 lbs **\$2299.99**

Available Accessories

BETIMATE Better RF accessory, AH2B Whip with mount, AH2BWHIPONLY Extra whip only for AH2B, AH4 80-6M 120W auto wire antenna tuner, CT17 Level converter, HM36 Scanning hand mic, OPC205D DC cable, PS125 25A switching power supply, SM20 Stand mic for base station, SM6 Electret desk mic, SP20 Speaker with audio filter, SP21 Speaker, UT102 Voice synthesizer



ID-1

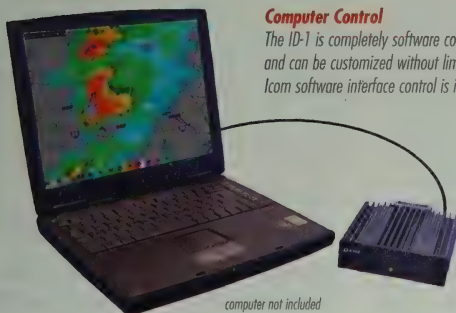
The 1.2 GHz Digital Alert

No matter how far you roam, you're never far from home.

Regardless of what Mother Nature throws at you, keep in touch with Icom's new ID-1. Operating on 1.2 GHz, you can send point to point communications via high speed 128K data. That's up to 4 times the speed of dial-up — and it's mobile!

Phone lines down from the storm? Access your e-mail via the ID-1. Let folks know everything is all right by attaching photos to your e-mails! You can even log on to your favorite Internet source for the latest news, or see what else Mother Nature has cooked up by logging on to the weather service Websites.

Whether chasing a storm, running a hurricane net with video, sending photos of disaster cleanup, or just checking out the DOT cameras while stuck in traffic, uses for the ID-1 are limited only by your imagination! See AES today!



Computer Control

The ID-1 is completely software controllable, and can be customized without limitation! Icom software interface control is included.

computer not included



RC-24 Control head shows all ID-1 operating information and is included.

Analog FM • Get on the air immediately! ID-1 can handle standard amateur repeater operation with CTCSS encode/decode with tone scan.

Digital Clarity • Any signal received in digital mode must match the codec in order to be heard, thereby eliminating intermod from your communications.

Spectrum Efficiency • (6.25kHz) Digital voice transmissions are up to 3 times more efficient than analog systems, requiring significantly less bandwidth! (15-20kHz typ)

128K Data • Take advantage of high speed wireless connection speeds! ID-1 extends your communications well beyond typical WLAN range, covering miles instead of blocks.

Use Digital Voice & Send Data • Slow down your data stream to 2.4K and you can talk while sending text messages (or GPS or packet-type or...). A ham radio first!

Enhanced APRS • Now you can use a single channel for voice and data! APRS® or other new software operations can now be utilized while a conversation is underway.

Written Directions • Type directions to assist foxhunters, getting DX cluster info, and more.

Auto Call Sign Registration • Incoming call signs are stored automatically while in digital modes. Find out who called while you were away!

Emergency Mode • Emergency button drops squelch, allowing station calls to come in.

10 Base T Ethernet Connection • On the back of radio. Ethernet extension cable included.

Black Box Operation • Configure the ID-1 for virtually tamper-free operation.

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IC-7800 HF/50MHz Transceiver The new Icom flagship is a fusion of 40 years of analog RF circuit development expertise, with cutting-edge digital technology. The result, astonishing 110dB dynamic range, +40dB 3rd order intercept point in HF, and other features like a double conversion superheterodyne system, mechanical relay BPF switching and two roofing filters. The ultimate in performance, function, and quality without compromise. • 1.8 to 29.7MHz amateur transmit, 0.03 to 60MHz general receive • USB, LSB, CW, RTTY, PSK-31, AM, FM, SSB DATA modes • SSB/CW synchronous tuning • 101 memories (99 regular, 2 scan edges), 10-character comment • Ultra high stability oven control crystal oscillator • Main and SUB receiver, external speaker connectors for each • Dual watch • RIT and ΔTX • 50MHz preamp and mixer • 5-200W (5-50 AM) • Built-in supply (85-265VAC) and high-speed HF/50MHz automatic antenna tuner • Voice synthesizer (frequency, mode and signal strength) • Four 32-bit, floating point, DSP units and 24-bit AD/DA converters • Digital RF speech compressor • Microphone equalizer (adjustable TX bandwidth) • Triple band stacking register • Multiple scan functions • Digital twin passband tuning • 16-step variable DSP noise reduction • Variable noise blanker • 7" color TFT LCD (spectrum scope S-meter, and RTTY/PSK-31 decode messages) • RTTY/PSK-31 without PC connection • Digital voice recorder (200 second RX memory, 99 second TX) • CF memory card for setting storage • Multi-function, fully adjustable, electronic memory keyer (DSP waveform shaping) • Double key jack system • Full break-in • 50 CTCSS tone enc/decode • UTC/local clock and timer function • Optical digital in/output • CI-V interface capability • BNC-type transverter connector • External CRT display connector • Four antenna connectors • Supplied accessories include 64MB CF memory card, spare fuses, key and pin plugs, rack mount handles, AC cable, speaker plugs, ACC plugs, power plug • 16.6" w x 5.9" h x 17.1" d, 55 lbs **TBA**

KENWOOD



HF RADIOS

TS-480HX HF+6M All-Mode Transceiver Tailor-made for DXing. Transmits on amateur bands 1.8 to 50MHz, including 60M • Continuous receive from 500kHz to 60MHz • Up to 200W output on HF (requires 2 PS-53s or equivalent), 100W on 6M • AF DSP offers powerful features such as digital noise limiter, beat cancel, noise reduction, transmit/receive equalizer, AF filters, transmit passband filter, speech processor • Separate LCD control panel with speaker, positioned up to 13 feet from main unit • Twin cooling fans • Full range of CW features, auto tune • Memory name function • Multiple scan functions • Direct frequency entry • CTCSS • Wide/narrow deviation selection • 1750Hz tone • Noise blanker • Crossband repeater (with TM-D700A) • Auto power off and time-out timer • Back lit keys • Optional IF filters available • PSK31 compatibility • Packet cluster tune (with TM-D700A) • PC-based control • 7.06" w x 2.38" h x 10.19" d (main unit), 7.06" w x 2.94" h x 1.44" d (panel) • 7.05 lbs. (main), 1.1 lbs. (panel) **\$1379.99**

TS-480SAT 100W version of the HX. Includes built-in automatic antenna tuner..... **\$1269.99**

Available Accessories

MC43S 8-pin hand mic, MC47 Multi function 8-pin hand mic, MC60A 8-pin amp desk mic, MJ88 Modular/8-pin adapter, PG20 22' DC cable, PG4Z 13' panel extension kit, PS53 Heavy-duty power supply, SO3 TCXO unit, SP23 Speaker, SP50B External mobile speaker, VGS1 Voice guide/storage unit, YF107C 500Hz CW filter, YF107CN 270Hz CW filter, YF107SN 1.8kHz SSB filter



TS-50S HF Transceiver • Covers 160-10M • General coverage receive 500kHz-30MHz • 100W output SSB/CW and FM (AM 25W) • 100 memory channels • Multiple scan functions • Powerful menu system • Dual VFOs • Comprehensive interference reduction • Full and semi break-in • CW reverse mode • All-mode squelch • IF shift • Switchable AGC • 20dB attenuator • Noise blanker • Multi-function hand mic • 7" w x 2.3" h x 9.1" d, 6.4 lbs **Closeout \$649.99**

Available Accessories

AT50 HF external auto tuner, KPS15 23A switching power supply, MC47 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, PG2Y DC cable, PG2Z 6.5' heavy-duty DC cable, PG4M 18' extension cable for the AT50, PS53 Heavy-duty power supply, SO2 TCXO unit, SP23 Speaker, SP50B External mobile speaker, TCSO Travel case, YK107C 500Hz CW filter



TS-570D(G) HF Transceiver • Covers 160-10M • General coverage receive 500kHz-30MHz • Variable output: 5-100W SSB/CW/FM and FSK (AM 25W) • 100 memories with extensive functions • Large amber-colored backlit LCD display • 10-key direct entry • 46 EZ-to-use menu functions • Multiple scanning functions • 16-bit AF-stage DSP VOX • XIT/RIT • IF shift • Noise blanker • All mode squelch • TX audio shaping • Built-in electronic keyer • Full and semi break-in CW • CW message memory • CW auto tune • 38 tone CTCSS encoder and 1750Hz tone • TX audio shaping • Packet and FSK • PC control option • Two antenna ports and packet port • Built-in automatic antenna tuner • Requires 13.8V DC @ 20.5A • 10.6" w x 3.7" h x 10.6" d, 15 lbs **\$989.99**

TS-570S(G) HF+6M Transceiver Same as the TS-570D(G), but covers 160-10M plus 6M. 50-54MHz general coverage receiver..... **\$1099.99**

Available Accessories

DRU3A Digital recording unit, KPS15 23A switching power supply, MB430 Mobile mounting bracket, MC43S 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, PG2Y 13' DC cable, PG2Z 6.5' heavy-duty DC cable, PS53 Heavy-duty power supply, SO2 TCXO unit, SP23 Speaker, SP50B External mobile speaker, VS3 Voice synthesizer, YK88CN1 270Hz CW filter, YK88C1 500Hz CW filter, YK88SN1 1.8kHz SSB filter



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TS-870S All Mode HF Transceiver • Covers 160-10M • General coverage receive 100kHz-30 MHz • 100W output SSB/CW/FM/FSK (25W AM) • 100 memory channels • Multiple scanning modes • Menu function • Variable AGC • IF digital filter (DSP) • DSP detection • Dual mode noise reduction • Automatic notch filter • Voice equalizer • Speech processor • Transmit equalizer VOX • QSK digital IF filter • DSP noise reduction • IF stage auto-notch beat cancel function • Variable AGC circuit • Built-in electronic keyer • CW pitch control • CW reverse • Radio control software program • Auto antenna tuner on transmit and receive • Built-in antenna tuner dual antenna terminals • External receiver antenna output jack • EZ menu system CTCSS encoder • High quality digital recording option • RS-232C port • Requires 13.8V DC @ 20.5A • 13" w x 4.75" h x 13" d, 25 lbs..... **\$1999.99**

Available Accessories

DRU3A Digital recording unit, KPS15 23A switching power supply, MC43S 8-pin hand mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, PG2Y 13" DC cable, PGZZ 6.5' heavy-duty DC cable, PS52 Heavy-duty power supply, SO2 TCXO, SP31 External speaker



TS-2000 HF/VHF/UHF All Mode Transceiver Offers 3 platforms: traditional transceiver with full function front panel, high-tech looking "silver box" version (TS-B2000), or computer controlled with software • 100W output on HF, 6M and 2M; 50W on 70cm; 10W on 1.2GHz (optional) • High performance true IF/stage DSP on main band, AF stage DSP on sub-band • Wide band receive • Digital filtering • Dual receive • Satellite ready, with transverter frequency display • Cross band repeat • Built-in auto tuner HF through 6M • Built-in TNC • Built-in RS-232 for computer control • Built-in TCXO (.5PPM) • CTCSS/DCS enc/dec • Electronic memory keyer • Backlit front key panel • 5+1 antenna ports - 2 for HF and 6M, 1 each for 2M, 70cm, 1.2GHz and HF receive **\$1699.99**

TS-B2000 HF/VHF/UHF All Mode Transceiver Same as the TS-2000 with high-tech "silver box" look. Includes PC control software **\$1549.99**

TS-2000X HF/VHF/UHF All Mode PC Controlled Transceiver TS-2000 w/1.2GHz..... **\$2199.99**

Available Accessories

ARCP2000 PC/radio control software (included with B2000 model), DRU3A Digital recording unit, KPS15 23A switching power supply, MB430 Mobile mounting bracket, MC43S 8-pin hand mic, MC57DM Lit TTP mic, MC60A 8-pin amp desk mic, MC80 8-pin electret desk mic, MC90 2-head DSP desk mic, PG2Y 13" DC cable, PGZZ DC cable, PS53 Heavy-duty power supply, RC2000 Remote face plate mobile kit, SP23 Speaker, VS3 Voice synthesizer

MFJ

MFJ ENTERPRISES, INC.



8708 Micro ATV Transmitter Transmits a high quality amateur television audio and video signal on 433.97MHz (cable channel 58, 59 or 60). Plug in an antenna and a video source (video camera, camcorder, or VCR). With a TV set, or down converter, tuned to the appropriate channel, you'll have a complete low power ATV video station. Puts out 50 to 100mW signal, capable of transmitting up to 1.8 miles with a 3-element beam. By using a suitable UHF amplifier, enjoy ATV communications over an extended range with other ATV ham operators. Requires 9V battery or other source..... **\$149.99**

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ORP SINGLE BAND CW TRANSCEIVERS

Easy operation! Sets up in seconds. • 5W CW • Great sensitivity - hot superhet receiver with super-great FET post amp stage in the IF filter • Excellent selectivity - tight CW bandwidth crystal ladder filter fights unwanted QRM and noise • Smooth and stable VFO (wide-spaced reduction drive VFO capacitor) • True RIT • Recovery AGC • Built-in 3" speaker • Low power drain - 50mA on receive and 1.2A peak on transmit • Semi-QSK - set adjustable hold transmit/receive switching to suit your normal sending speed or set for full QSK during contests • Compact • Four models below

9015 5W, 15M (21.000-21.200MHz) **\$169.99**
9020 5W, 20M (14.000-14.075MHz) **\$169.99**
9030 5W, 30M (10.100-10.150MHz) **\$169.99**
9040 5W, 40M (7.000-7.150MHz) **\$169.99**

Available Accessories:

1772 Portable 20M dipole, 1774 Portable 40M dipole, 27 Handle for CW station, 4110 portable AC power supply, 4114 Rechargeable power pack, 412 Plug-in Curtis keyer, 726 Plug-in audio filter, 971 200W portable antenna tuner/meter



LOW POWER SINGLE BAND SSB TRANSCEIVERS

No microprocessor - turn on and tune in. • 20W PEP (Less on VHF models) - plus Constant Current™ syllabic speech processing for an added 4-6dB advantage to cut through noise, fading, and QRM • Handheld dynamic mic that complements speech processing • Low drain - 3A from 12V supply or battery • Low noise preamp and active double balanced mixer front end • Sharp 2.3kHz SSB crystal ladder filter reduces passband noise, fights QRM, and improves intelligibility • TVI protection (built-in 7 element lowpass filter) • Real S-meter • Reduction drive analog VFO allows scanning the band for signals quickly, then zeros in smoothly • Amplifier jack • 2.5h" x 6.5" w x 6" d

9420X 20M SSB (14.150-14.350MHz)..... **\$229.99**
9440X 40M SSB (7.150-7.3MHz)..... **\$229.99**
9475X 75M SSB (3.75-4.00MHz)..... **\$229.99**

Available Accessories:

4110 Portable AC power supply, 4114 Rechargeable power pack, 415B CW adapter (9420X and 9440X only), 971 200W HF tuner

SGC



HF SSB TRANSCEIVERS

04-01 SG-2000 HF SSB Global Radio Tele-phone With full frequency coverage for voice and data. Talk anywhere in the world on the HF Ham bands, receive and send time sensitive documents, decode UPI transmissions, get latest weather reports or listen to shortwave broadcasts. Also, great for marine use. It can be fully computer controlled via a standard RS-232 connector. The front panel can also be used as a remote head terminal (up to 8 remote heads can be utilized). • 1.8-30MHz tx, 500kHz-30MHz general rx • 150W • Modes: A3A, A3H, A3J and CW in LSB/USB, true AM in receive mode and data • 100 field-programmable and 644 factory-programmed ITU & data channels • 100 programmable scan channels • 13.6 VDC @ 16A • 4.75" h x 10" w x 15" d, 12 lbs **Closeout \$1429.99**

Available Accessories:

5182 Fan kit for continuous transmit, 5234 RS232 interface, 5251 CA-1 HV feed wire, 5254 CA-2000 remote head cable, 5261 PSC/12-1 12" power supply cable/1 plug, 5262 PSC/12-2 12" power supply cable/2 plugs, 5304 PS-30 30/40A peak unregulated power supply, 5305 PS-50 50/70A peak unregulated power supply

• 1-800-321-3594 OH • 1-800-327-1917 FL • 1-800-634-6227 NV

Email Your Questions to info@aesham.com

AES

RADIOS

53



FT-847 HF/VHF/UHF All-Mode HF, 50, 144 and 430MHz with full satellite capability • Covers 160-6M, 2M, 70cm and 5.1675MHz (Alaska emergency channel) • General receive: 100kHz-30MHz, 36-76, 108-74, 420-512MHz • 100W on HF/6M (25W AM); 50W (12.5W AM) on 2M/430MHz • High resolution 0.1Hz tuning steps • Shuttle-Jog™ tuning ring • Direct frequency keypad entry • Low noise VHF/UHF preamps • Advanced DSP enhances signal-to-noise ratio via sophisticated bandpass, noise reduction and auto notch filters • Cross band full duplex • Normal/reverse tracking • Dedicated satellite memories • 1200/9600bps packet ready • CW side-tone/pitch control • Built-in CTCSS/DCS • 4 antenna jacks (rear panel) • Requires 13.8V DC @ 22A • 10.2" w x 3.4" h x 10.6" d, 14.4 lbs **\$1569.99**

Available Accessories:

W4R ANTENNABOSS W4RT interface, ATAS120 HF/6/2/430 antenna, ATBK100 ATAS100 base kit, CT39 Packet cable, CT61 Amp interface cable, FC20 Automatic antenna tuner, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, FV51A Voice synthesizer, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk mic, MH36D DTMF mobile microphone, MMB66 Mobile mounting bracket, SP8 External speaker with filters, T9018320 DC cord, YF115C 500Hz CW/Collins Mechanical filter, YF115S02 2.5kHz SSB/Collins Mechanical filter, YH775TA Stereo headphone



FT-857D Ultra-compact, HF/VHF/UHF 100W All-Mode Mobile Blends leading-edge technologies of the FT-897 and MARK-V into the smallest full-power HF multi-mode transceiver. Now includes 60M! Unique ergonomics deliver unmatched ease of use with an ultra-compact design featuring a large, main tuning dial. • 100W HF/6M, 50W 2M, 20W 70cm • Transmits on HF, 50MHz, 144MHz and 430MHz, plus 0.1-56MHz, 76-108MHz, 118-164 MHz and 430-470MHz receive • 200 memories with 10 groups • Enhanced performance with installed DSP board • Large, multi-color dot matrix display • IF shift and noise blanker • IPO • AGC • CTCSS/DCS • Auto repeater shift • SmartSearch™ • Spectrum scope • ARTS™ • Optional remote-head operation and remote control microphone • 6.1" w x 2.0" h x 9.2" d, 4.6 lbs **\$779.99**

Available Accessories:

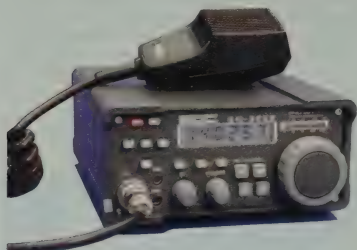
W4R ANTENNABOSS W4RT interface, W4R OTT897 W4RT one-touch tune, ATAS120 HF/6/2/430 antenna, ATBK100 ATAS100 base kit, CT39 Packet cable, CT58 Band data cable, CT62 Cat interface cable, FC30 External antenna tuner, FP1023 23A switching power supply, FP1030A 25A power supply with meters, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk microphone, MH36EJ TTP microphone, MH59AJ Remote control TTP microphone, MLS100 Mobile speaker, MMB67 Quick release mobile bracket, SP6 External speaker, T9023225 Extra DC cord, TCX09 TCXO unit (0.5ppm), YF122C 500Hz Collins CW filter, YF122CN 300Hz Collins SSB filter, YH775TA Stereo headphones, YK857 Separation kit



04-10 PowerTalk™ SG-2000 HF SSB Transceiver With the PowerTalk™ SG-2000, you'll intercept more weak HF signals, increase signal clarity and eliminate unwanted noise. You'll hear SSB signals clearer and easier than ever before. Combines SGC's exclusive 'ADSP™' (Automatic Digital Signal Processing) and 'SNS™' (Signal Noise Subtraction). A DSP command center with a high performance spinner knob and bright LED indicators. Includes all of the outstanding features of the SG-2000: 644 Ham and ITU discrete frequencies • 150W • Programmable memory • Large LCD. **C/O \$1649.99**

Available Accessories:

5234 RS232 interface, 5251 CA-1 HV feed wire, 5254 CA-2000 remote head cable, 5261 PSC/12-2 12" power supply cable/1 plug, 5262 PSC/12-2 12" power supply cable/2 plugs, 5304 PS-30 30/40A peak unregulated power supply, 5305 PS-50 50/70A peak unregulated power supply



05-04 SG-2020 ADSP™ Transceiver For base, backpack or business trips – the ultimate portable transceiver. Operate SSB or CW from wherever you are. The SG-2020 draws only 400mA receive and less than 3 Amps transmit at 20 Watts. Output power adjustable from 0-20W PEP. VOGAD baseband RF speech processing and RF clipping provide plenty of talk-power. No confusing menus and two-step operation: select your frequency and transmit. Fully integrated ADSP™ for superior sound clarity, the SG-2020 is pure, simple HF at its best. • Transceiver: 1.8-29.7MHz • 0-20W PEP • <0.8mA receive • <3A transmitting current • Built-in iambic B keyer 5-50 wpm • ADSP2: 13dB and 26dB noise reduction • 2.8" h x 6.2" w x 7.3" d, 4.4 lbs **\$789.99**

05-01 Same radio as above with 40 memories, excluding the ADSP™ **Closeout \$599.99**

Available Accessories:

5422 SG-239 200W SmartTuner



FT-817ND HF/VHF/UHF Backpack Transceiver Self-contained and low power for portability. • 160-10M, 60M, 50MHz, 144MHz, 430-450MHz, plus Alaska emergency channel (5167.5kHz) tx • 100 kHz-56MHz, 76-154MHz, 420-470MHz, plus AM aircraft rx • 200 alphanumeric memories (home channels and band-limit) • SmartSearch™ memory loading • 5W SSB/CW/FM (13.8V external DC), 1.5W AM, 2.5W SSB/CW/FM (9.6V NiCad pack or 8 AA's, includes internal alkaline case), 0.7W AM, up to 5W SSB/CW/FM power programmable via menu • USB, LSB, CW, AM, FM, W-FM, AFSC, packet • RTTY, PSK31-U, PSK31-L, user-defined USB/LSB • 2-color, multi-function LCD • Meters ALC, power output, SWR, modulation • RF gain/squelch control • Noise blanker • Attenuator • Dual VFOs, split capability, IF shift, and RIT • Electronic keyer • VOX • Auto repeater shift • CTCSS/DCS • Front/rear antenna jacks • 3 accessory jacks • PC control capability • Includes 1400mAh NiMH battery and charger • 5.31" w x 1.5" h x 6.5" d, 2.6 lbs **\$629.99**

Available Accessories:

W4R OTT1 W4RT one-touch tune, W4R OTT897 One-touch tune, ATAS25 40/20/15/10/6/2/430MHz antenna, CSC83 Soft case, CT39 Packet cable, CT62 Cat interface cable, EDC6 DC cord, ENB72 9.6V 1000mAh NiCad, MH36EJ TTP mic, MLS100 Mobile speaker, NC72B Wall charger, TCX09 TCXO unit, YF122C 500Hz Collins CW filter, YF122CN 300Hz Collins CW filter, YF1225 2.3kHz Collins SSB filter



FT-840 Compact High Performance HF Transceiver Blending high performance digital synthesis techniques, convenience and affordability from previously successful radios, the FT-840 adds a choice of two optional remote automatic antenna tuners and a wealth of convenient functions. • Direct Digital Synthesis • Covers 160-10M with 50 kHz-30MHz general coverage receiver • 100W output (25W AM) • 100 memory channels • Low noise FET front end • Two direct digital synthesizers (DDSS) and magnetic rotary encoder for smooth tuning • Twin band-stacking VFOs • IF shift • Reverse CW • FM repeater with auto 10M repeater offset • Selectable CTCSS • Requires 13.8V DC @ 20A • 9.2" w x 3.6" h x 9.5" d, 9.9 lbs **\$579.99**

Available Accessories:

FC10 Extra coax fed auto tuner, FC800 Extra long wire auto tuner, HF232C RS-232 interface, FM747 FM unit, FP1023 23A switching power supply with fan, FP1030A 25A power supply with meters, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk mic, MLS100 Mobile speaker, MMB20 Mobile mount, SP6 External speaker, TCX04 TCXO unit, T9018320 DC cord, YF112A 6kHz AM filter, YF112C 500Hz CW filter, YH775TA Stereo headphone

FREE ITEMS included with some radios.
See Price Guide for details.

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FT-897D HF/VHF/UHF Multi-Mode Portable/ Base Self-contained transceiver, operates without external supply! Now includes 60M! Using the optional 13.2V @ 4500mAh NiMH battery pack, operates at 20W on all bands except 430MHz. Two batteries may be installed simultaneously giving up to 8 hours of use. • 100W (HF/50MHz), 50W (144 MHz) and 20W (430MHz) on external 13.8V DC • Adjustable down to 5W • SSB/CW/AM/FM and digital modes • Large-diameter main tuning dial • Built-in keyer, DSP and TCXO • Selectable tuning steps (2kHz/4kHz) • Easy receiver offset tuning • Scrolling front panel, multi-function keys with instant "hot key" • RS-232 port • Aluminum, die-cast chassis • Thermostatically-controlled twin fans • 7.9" w x 3.14" h x 10.3" d, 8.6 lbs..... **\$889.99**

Available Accessories:

W4R ANTENNA/BOSS W4RT interface, W4R OTT897 W4RT one-touch tune, ATAS120 HF/6/2/430 antenna, ATBK100 ATAS100 base kit; use with mount, CD24 4-hour charge adapter, CT39 Packet cable, CT62 Cat interface cable, FC30 Antenna tuner, FN878 4.5ah NiMH, FP30 Internal power supply, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk mic, MH36E8J TTP mic, MLS100 Mobile speaker, MMB80 Mounting bracket, PA26B Charger for CD24, SP6 External speaker, T9023225 Extra DC cord, YF122C 500Hz Collins CW filter, YF122CN 300Hz Collins CW filter, YF122S 2.3kHz Collins SSB filter, YH77STA Stereo headphones



FT-1000MP MK V 200W HF All Mode Transceiver The crowning achievement in Yaesu's HF transceiver design history. A unique blend of analog and digital technology, the MARK-V is based on the concept of rigorous filtering in all stages of the receiver and transceiver. Introduces all-new features to the FT-1000 series. • Interlocked Digital Bandwidth Tracking, which matches the receiver passbands of the 8.2MHz IF, 455kHz IF and DSP systems • Variable RF Front-end Filter, providing a high-Q "Preselector" system protecting the receiver's front end • 200W MOSFET final amplifier, conservatively rated with revolutionary heat sink design • 75W optional Class-A PA operation, providing extraordinary SSB signal purity • Integrated ShuttleJog™ control, combines IBDT and VRF access buttons with the ShuttleJog™ frequency control • High-speed automatic antenna tuner for 200W operation • Separate switching power supply, provides 30V for MOSFET PA transistors, and 13.8V for other circuitry • 16.4" w x 5.4" h x 13.9" d, 31 lbs. (xcvr), 4.2" w x 5.4" h x 13.6" d, 13 lbs. (power supply)... **\$2089.99**

Available Accessories:

DV52 Voice recording module, FH1 Remote control keypad, FTV1000 200W 6M transverter, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk mic, MH31B8 Extra hand mic, SP8 External speaker with filters, TCX06 Deluxe TCXO unit, YF110CN 250Hz CW filter/XFF, YF110SN 2kHz SSB filter/XFD, YF114CN 250Hz CW second IF main receive, YF114SN 2kHz SSB second IF main receive, YF115C 500Hz CW/Collins Mechanical filter, YH77STA Stereo headphone



MK V FIELD Leading-Edge Technology, 100W Self-Contained Design 160-10M tx (amateur only), 100kHz-30MHz rx • All modes • Adjustable up to 100W (25W AM) • Selectable Class-A 25W SSB output • Self-contained 117/200VAC power supply, 13.8VDC optional • Built-in TCXO • Dual receive with independent AGC systems • Integrated digital bandwidth tracking • Enhanced DSP • Digital SSB mic equalizer and RF speech processor • Selectable digital modulation/demodulation • Digital auto-notch • Variable RF front-end filter • Selectable SSB pattern-contour filters • Three RF preamp modes (IPO (Direct Mixer Feed) • IF filter chain includes 10-pole Collins mechanical filter • Built-in antenna tuner • Electronic memory keyer • Outstanding CW features • Ergonomic, multi-function shuttle jog dial • 16" w x 5.3" h x 13.7" d, 33 lbs..... **\$1739.99**

Available Accessories:

DV52 Voice recording module, FH1 Remote control keypad, FP29 Power supply for FTV1000, FTV1000 200W 6M transverter, LL7 Phone patch unit for SP8, MD100A8X Desk mic with tone control, MD200A8X Deluxe high fidelity desk mic, MH31B8 Extra hand mic, SP8 External speaker with filters, TCX06 Deluxe TCXO unit, YF110CN 250Hz CW filter/XFF, YF110SN 2kHz SSB filter/XFD, YF114CN 250Hz CW second IF main receive, YF114SN 2kHz SSB second IF main receive, YF115C 500Hz CW/Collins Mechanical filter, YH77STA Stereo headphone



SINGLE BAND MOBILE RADIOS

The AR-147+, 247 and 447 include features expected in a modern mobile including AM air receive (147+ only), direct frequency entry, lots of memory channels and more. Both CTCSS and DCS to ensure compatibility with all repeater systems. • MARS/CAP capable • 80 multi-function memories plus call • Auto repeater offset • 9 DTMF autodialer memories • redialer • Programmable band, memory scan and frequency/channel display • DTMF paging • Dual frequency watch • PC programmable

AR-147+ 2M Mobile Transmit: 144-148MHz

• Receive: 118-171MHz • Three power settings (60, 10, 5W) • 1.5" x 5.5" x 6.25", 2.7lbs **\$149.99**

AR-247 220MHz Mobile Transmit: 222-225MHz

• Receive: 216-229MHz • Three power settings (30, 10, 5W) • 1.5" x 5.5" x 6.25", 2.7lbs **\$209.99**

Available Accessories:

MTGBKT Mobile bracket, PROG47 PC programming software and cable, PWRCORD DC cable



SINGLE BAND MOBILES

DR-135TP 2M Mobile/Base Voice/Data Transceiver 144-148MHz tx; 118-135.995MHz (AM aircraft), 136-173.995MHz rx • 50/10/5W • Wide or narrow FM • 1200/9600bps TNC • 100 alphanumeric memories • 7-character, 3-mode display • CTCSS/DCS, 4 Euro bursts • Backlit DTMF mic • 10 autodial memories • Multi scan modes • Front panel GPS input • Rear PC connection • Ignition key on/off • Theft alarm • 13.8V DC @ 11A • 5.58" w x 1.57" h x 6.83" d, 2.3 lbs... C/O **\$249.99**

DR-135TPMKII Same as 135TP with addition of ± 2.5ppm crystal and new digital board... **\$269.99**

DR-135TMKII Same as 135T with addition of ± 2.5ppm crystal and new digital board..... **\$169.99**

DR-235T 135T, but covers 222-224.995MHz tx, 216-279.995MHz rx • 25W/10/5W..... **\$249.99**

DR-435TMKII Same as 435T with addition of ± 2.5ppm crystal and new digital board..... **\$269.99**

Available Accessories:

EDC37 DC cable, EDC43 Cigarette lighter cable, EJ40U Digital board (T and TP's only), EJ41U 1200/9600 TNC (T and TMKII's only), EJ47U Digital board (MKII's only), ERW4 PC cable, HK130 Hardware kit, MB130 Mounting bracket, PC15B DC cable, SW620 Windows programming software

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HF RAPIDS

Manufacturer	Model	ALINCO*	ALINCO	ICOM*	ICOM	ICOM	ICOM	ICOM	ICOM	KENWOOD	KENWOOD*	KENWOOD	KENWOOD	KENWOOD	KENWOOD	MFJ
			IC-703 IC-703PLUS	IC-706MAGIS	IC-718	IC-746PRO	IC-756PROII	IC-7800	TS-2000, TS-82000 TS-2000X	KENWOOD	KENWOOD	KENWOOD	TS-480HX	TS-480SAT	KENWOOD*	
	Bands	HF 6M (Plus only)	HF 6M 2M, 70CM 30-60 (Plus only)	HF 6M 2M, 70CM 400-470	HF 6M 2M	HF 6M 2M	HF 6M	HF 6M	HF 6M 70CM, 1.2GHz 03-60, 142-152 420-450 1240-1300*	HF 6M 2M 5-30	HF 6M 60M 5-60	HF 6M 60M	HF 6M 5-30, 6M	HF 6M 5-30	HF 6M 5-30	15M 21- 21.2
	Rx Range (MHz)	5-30	30-60 (Plus only)	400-470	.03-30	.03-200	.03-60	.03-60	03-60, 142-152 420-450 1240-1300*	5-30	5-60	5-60	5-30, 6M	5-30	5-30	21- 21.2
	Power (SSB/CW/FM)	10-100W	10/5W	5-100 HF/6M 5-50, 2M 2-20, 70CM	5-100W ²³	5-100	5-100W	5-200W	100W HF/6M 100W 70CM 10W 1.2GHz*	100W	200W HF ¹⁰⁰ 100W 6M	100W	5-100W	5-100W	100W	5W CW
	Power (AM)	4-40W	2/4W	2-40W HF/6M 2-20W 2M 2-8W 70CM	2-40W	5-40W	5-40W	5-50W	10W HF/6M 12.5W 70CM 2.3W 1.2GHz*	5-40W	5-25W	5-50W	5-25W	5-25W	25W	No
DSP	Tuner	No	Yes	Yes	Optional	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Keyer		No	Yes	Optional	Optional	Internal	Internal	Internal	Yes	No	Optional	Yes	Yes	Yes	Yes	No
Speech Readout		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Voice		No	Optional	Optional	Optional	Optional	Optional	Yes	Optional	No	Optional	Optional	Optional	Optional	Optional	No
Power Requirements		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Antenna ports		No	9-15.8VDC 2/3A	12VDC 20A	12VDC 20A	12VDC 20A	12VDC 23A	85-265VAC	12VDC 20.5A	12VDC 20.5A	12VDC 41A	12VDC 20.5A	12VDC 20.5A	12VDC 20.5A	12VDC 20.5A	12VDC 12A
Computer Port		Optional	1	Optional	Optional	Optional	Optional	Yes	5	1	2	2	2	2	2	1
Height (in.)		3.7	2.3	2.3	3.75	4.7	4.3	5.9	3.75	2.4	2.4	2.4	3.8	3.8	4.8	2.5
Width (in.)		9.8	6.56	6.6	9.44	11.3	18.3	16.6	10.625	7.1	7	10.6	10.6	10.6	13	6.5
Depth (in.)		7	4.87	7.9	9.40	12.5	11.2	17.1	12.5	9.2	10.2	10.7	10.7	10.7	13.1	6
Weight (lbs.)		8.4	4.4	5.5	8.4	19.5	21	55	17.19	6.4	7	7	15	15	25.4	2

Manufacturer	MFJ	MFJ	MFJ	MFJ	MFJ	MFJ	SGC*	SGC*	SGC	YAESU	YAESU	YAESU	YAESU	YAESU	YAESU	YAESU
Model	9020	9030	9040	9420X	9440X	9475X	04-01 SG-2000	04-10 POWERALK	05-01/05-04 SG-2020	FT-817ND	FT-840	FT-847	FT-857D	FT-897D	FT-1000MP	YAESU MK V FIELD
Bands	20M	30M	40M	20M	40M	75M	HF	HF	HF	HF, 6M 2M, 70CM	HF	HF, 6M 2M, 70CM	HF, 6M 2M, 70CM	HF, 6M 2M, 70CM	HF	HF
Rx Range (MHz)	14- 14.075	10.1- 10.15	7-7.15	14.15- 14.35	7.15-7.3	3.75-4	5-30	5-30	1.8-29.7	1-56 76-154 420-470	1-30	1-30, 36-76 108-174 420-512	1-56, 76-108 118-164 420-470	1-56, 76-108 118-164 420-470	1-30	1-30
Power (SSB/CW/FM)	5W CW	5W CW	5W CW	12W SSB	12W SSB	12W SSB	150W SSB/CW	150W SSB/CW	0-20W SSB/CW	5W	100W ^(a)	100W HF 50W 2M/70CM	100W HF/6M ^(a) 50W 2M ^(a) 20W 70CM ^(a)	100W HF/6M ^(a) 50W 2M ^(a) 20W 70CM ^(a)	200W	100W
Power (AM)	No	No	No	No	No	No	40W	40W	No	1.5W	25W	25W HF/6M 12-3W 2M ^(a) 12-3W 70CM ^(a)	25W HF 12-3W 2M ^(a) 5W 70CM ^(a)	25W HF/6M ^(a) 12-3W 2M ^(a) 5W 70CM ^(a)	50W	25W
DSP	No	No	No	No	No	No	Yes	Yes	No	No	No	No	Optional	Yes	Yes	Yes
Tuner	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Keyer	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Speech Readout	No	No	No	No	No	No	No	No	No	No	No	Optional	No	No	No	No
Vox	No	No	No	No	No	No	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes
Power Requirements	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 1.2A	12VDC 30A	12VDC 30A	12VDC 5A	12VDC 2A	13.8VDC	13.8VDC 22A	12VDC 22A	13.8VDC 22A	FP29 30V (supplied)	125VAC 13.8VDC
Antenna ports	1	1	1	1	1	1	1	1	1	2	1	4 ^(a)	2	2	2	2
Computer Port	No	No	No	No	No	No	Optional	Optional	Optional	Yes	Optional	RS-232	Optional	RS-232	Yes	Yes
Height (in.)	2.5	2.5	2.5	2.5	2.5	2.5	4.6	4.6	2.75	1.5	3.7	3.4	2	3.14	5.4	5.3
Width (in.)	6.5	6.5	6.5	6.5	6.5	6.5	10	10	5.5	5.3	9.4	10.2	6.1	7.9	16.4	16
Depth (in.)	6	6	6	6	6	6	15	15	7.25	6.5	9.6	10.6	9.2	10.3	13.9	13.7
Weight (lbs.)	2	2	2	2	2	2	12	12	2.5	2.6	1.2	14.4	4.6	8.6	31	33

*Removable control head

000 and B versions

000 and B versions

cond port

for 2M

117 101

(5) Port per band. HF/6M can be combined

(5) Port per band. HF/6M can be combined

(7) No FM

(7) NO FIM

(8) On internal batteries: ZOW (LOW on 70C

(9) On internal batteries: 5W (2.5W on 70cm)

(10) Requires DC 13.8V power supply

FREE ITEMS included with some radios.
See Price Guide for details



DR-M06TH 6M FM Transceiver Covers 50-54MHz
• FM, selectable 20/1W output • 100 memories plus CALL channel • 50 tone CTCSS encoder • Programmable repeater offset for each memory channel • Time-out-timer • 13.8V DC @ 3A • 5.5" w x 1.5" h x 4.5" d, 1.6 lbs • Includes DTMF hand mic **\$259.99**

Available Accessories:

HK130 Hardware kit, MB130 Mounting bracket, PC15B DC cable



DUAL BAND MOBILES

DR-605TQ FM Dualbander 144-147.995MHz, 430-449.995MHz tx; 136-173.995MHz, 420-470 MHz rx • 50/10/5W (VHF), 35/10/5W (UHF) • 50 memories, 1 call per band • Cross band repeat, full duplex • Dual VHF/UHF only displays • Multi scan functions • CTCSS encode, 3 European tone bursts • Twin volume controls • Packet compatible • Cable cloning • Internal antenna duplexer • 13.8V DC @ 11.5A • 5.58" w x 1.57" h x 6.8" d, 2.4lbs. **\$339.99**

Available Accessories:

ED58 EMS14-DR605 adapter, EMS14 Desk top mic, HK130 Hardware kit, MB130 Mounting bracket, PC15B DC cable



DR-620T Twin Band Mobile Operates on 2M and 70cm. 144-147.995, 430-449.995MHz transmit, and 108-173.995, 335-480, 87.5-108MHz receive. AM Aircraft band reception and MARS modifiable. VHF/UHF operation includes V/U, V/V and U/U (Not capable of full-duplex V/U,V/V,U/U operation). • 200 memories • 50/10/5W VHF, 35/10/5W UHF • Built-in duplexer • Large, alphanumeric, selectable color display • Removable control head can be remote mounted or allow transceiver to be inverted • Optional 1200/9600 bps packet • Direct GPS input for APRS mobile tracking (optional) • Digital voice (optional) • Illuminated DTMF mic allows direct VFO frequency entry and remote control • CTCSS/DCS encode/decode (4 tone bursts) • Programmable VFO and memory scan including timed, busy and skip modes • Time-out timer • Busy-channel lock out • Temperature-compensated crystal oscillator • Ignition key power on/off feature • Power supply voltage display • Theft alarm • 5.5" w x 1.6" h x 7.3" d, 2.2 lbs. **\$339.99**

Available Accessories:

EDC59 Separation kit, EJ47U Digital board, EJ50U TNC unit, ERW4 PC cable, HK130 Hardware kit, MB130 Mounting bracket, PC15B DC cable, SW620 Windows programming software



SINGLE BAND MOBILE

IC-2100H-25N Rugged 2M Transceiver Icom's best performer against IMD. Straight-forward operation • 50/10/5W • 144-148MHz transmit • 136-174 MHz receive • One-touch button operation • 113 memories • Dual, alphanumeric, selectable green/amber backlit display • Backlit TTP mic with 2 programmable keys • One-piece, diecast aluminum chassis • Adjustable attenuator • CTCSS tone enc/decode (50 tones) • Tone scan • Auto repeater with busy lockout • Priority watch • Cloning capability • Mounting bracket • Built to military spec for shock and vibration • Requires 13.8V DC @ 12A • 5.5" w x 1.6" h x 7.1" d, 2 lbs., 10 oz **\$169.99**

Available Accessories:

BC96 Microphone holder, CSW2100 Windows software and cable, CS2100 DOS cloning software, EX1759 Infrared receiver, HM1335 Extra touch-tone mic, HM90A Wireless microphone, MB17A Quick release bracket, MB28H Mobile bracket, OPC346 9.8' DC cable, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC474 Radio-to-radio cloning cable, OPC478 PC cable, OPC589 8-pin mic jack adapter cable, OPC647 8.2' microphone extension cable, SP10 Slim-line external spkr



IC-2200H 2M FM Transceiver Offers new digital features while retaining the user interface from the popular IC-2100H. The large tuning dial provides easy access without even looking at the front panel. Secondary functions are easily recalled by holding the appropriate button. • 144-148MHz transmit, 118-174MHz receive (includes AM aircraft band and weather channel with alert) • 65/25/10W selectable • FM-Narrow mode, switchable • 207 memories (including 6 scan edges and 1 call channel) • Dynamic Memory Scan (DMS) • 50 CTCSS and 104x2 DTCSS encode/decode plus tone scan functions and "pocket beep" • 24 DTMF autodial memories • Selectable green and amber display • Includes remote control microphone, DC power cable, mobile mounting bracket and microphone hanger • 5.5" w x 1.56" h x 5.25" d, 2.75 lbs. **TBA**

Used & Demo
Equipment lists
Updated regularly on the web.
Check them out and order **On-line**



IC-V8000 2M FM Transceiver 75W output power – a first! • TX 144-148, RX 136-174MHz • 207 alphanumeric memory channels including 1 call channel, 6 scan edges • Weather alert and weather channel scan • DMS scan system • Each memory channel stores a 6 character name, tone frequency, skip info, and more • Priority watch • CTCSS/DTCS • Dynamic Memory Scan, customize/manage memory banks • DTMF encode and pager function capability • 10 DTMF memory channels with up to 24 digit DTMF codes • Versatile cloning from transceiver to transceiver or PC to transceiver • Front mounted speaker • One-piece, die-cast, rugged, aluminum chassis • Large cooling fan on the back and large cooling fins • Selectable green or amber display • Includes HM-133V remote control microphone • 5.9" w x 2" h x 5.9" d, 2.22 lbs. **\$189.99**

Available Accessories:

CSV8000 Windows software, OPC1132 9.8' DC cable, OPC347 23' DC cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC474 Radio-to-radio cloning cable, OPC478 PC cable, OPC478U PC USB cable, OPC589 8-pin mic jack adapter cable, OPC647 8.2' mic extension cable, SP10 Slim-line external speaker, UT108 DTMF decoder unit, V8000MMB Mobile bracket



DUAL BAND MOBILES

IC-2720H 2M/70cm FM Transceiver Provides VHF/VHF, UHF/UHF simultaneous receive capability along with VHF/UHF full duplex. • Wide/narrow channel spacing • 144-148, 430-450MHz tx • Extra wideband (cell blocked) receive 118-550MHz (left), 118-174, 375-550, 810-999MHz (right) • Weather, WX alert, and Air bands • 212 memories (10 banks), 2 call, 10 scan edges • Auto repeater function • 50/35W (2M/70cm) • Full function, backlit remote control mic with "hot keys" • Wide viewing angle • Independent controls for each band • 12 DTMF memories • User-selectable amber/green display • CTCSS/DTCS enc/decode, tone scan and pocket beep • Dynamic memory scan • Control head and main unit mic jacks • 1200/9600 bps 6-pin terminal • PC programmable (optional software and cable) • 11.5' separation cable included • 13.8V DC @ 12A • 5.5" w x 2" h x 1.1" d, 5.29 oz. (head), 5.5" w x 1.6" h x 7.4" d, 3.08 lbs. (main) **\$369.99**

Available Accessories:

CS2720 Windows/DOS cloning software, MB17A Quick release bracket, MB65 Mounting base platform, MB84 Remote controller bracket, MB85 Combination bracket, OPC1132 9.8' DC cable, OPC1156 11.5' separation cable, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC474 Radio-to-radio cloning software, OPC478 PC RS232C cable, OPC478U PC USB cable, OPC589 8-pin mic jack adapter cable, OPC647 8.2' mic extension cable, SP10 Slim-line external speaker

ICOM



IC-208H 2M/440 Dualband Mobile More power, wider receive, lots of memory! Powerful 55/50W (2M/440) output • 118-173, 230-549, 810-999MHz (cell blocked) wide band receive • Weather channel and alert • 500 6-character alphanumeric memory channels • Improved Dynamic Memory Scan (10 banks, 2-100 channels per bank) • New bank listing allows selection of banks you want to scan • Built-in CTCSS/DTCS tone squelch • Operate with control head attached or remote mounted with included cable • Pocket beep and tone scan • 16 DTMF memories • 9600bps data connector • Auto repeater function • Multicolor display lighting and backlit buttons • Remote control microphone included • 5.56" w x 1.56" h x 7.31" d, 2.65 lbs **\$299.99**

Available Accessories:

CS208 Windows cloning software, MB17A Quick release bracket, MB58 Remote controller bracket, MB65 Mounting base platform, OPC1132 9.8' DC cable, OPC347 23' DC power cable, OPC440 16.4' mic extension cable, OPC441 Speaker extension cable, OPC474 Radio-to-radio cloning cable, OPC478 PC RS232C cable, OPC478U PC USB cable, OPC589 8-pin mic jack adapter cable, OPC601R 23' separation kit, OPC647 8.2' mic extension cable, SP10 Slim-line external speaker

FREE ITEMS included with some radios.
See Price Guide for details.

KENWOOD



SINGLE BAND FM MOBILE TRANSCEIVERS

TM-271A 2M FM Transceiver Delivers powerful mobile performance with 60W output and other great features such as multiple scan functions and memory names. MIL-STD compliant, high quality audio, illuminated keys and a large LCD with adjustable green backlighting • 200 memories • FM wide/narrow • N.O.A.A. weather band reception with warning alert tone • CTCSS, DCS and 1750Hz tone burst • Auto repeater offset • FREE Memory Control software available online **\$189.99**

Available Accessories:

MJ88 Modular/8-pin adapter, PG2N DC cable, PG5D PC interface cable, SP50B External mobile speaker



TM-461A 440MHz Fully loaded with features and built to MIL-STD specifications. Supremely user-friendly. • 438-450MHz transmit; 400-470MHz receive • 35/10/5W • High RF output • 61 multi-function memories plus 1 call channel • Memory Name (MN) function with 6-digit alphanumeric display • DTSS selective calling • Multi-scan capability • Dual menu system • Multi-function microphone with backlit keys • DTMF memory function • Built-in CTCSS tone encoder (optional decoder) • Tone scan • Wireless cloning function • Repeater reverse switch • Lock function • Busy channel lock out • Auto power-off • Time-out timer • 13.8V DC @ <11A • 5.5" w x 1.5" h x 6.3" d, 2.2 lbs **\$439.99**

Available Accessories:

MB201 Mobile bracket, MJ88 Modular/8-pin adapter, PG2N DC cable, SP50B External mobile spkr, TSU8 CTCSS decoder



TM-541A 1200MHz FM Mobile Transceiver Extremely compact and lightweight, perfect for mobile installation. Enhanced night-time operation with its illuminated keys, large LCD, and backlit microphone with DTMF. Covers 1240-1300MHz transmit and receive • 10W RF power output • Easy-to-read, easy to operate illuminated keys plus large LCD display • 20 multi-function memory channels plus call channel • Built-in CTCSS tone encoder • ALT (Automatic Lock Tuning) • Tone alert system with elapsed time indicator • DTSS (Dual Tone Squelch System) • Pager function • Auto-power off • Time-out timer • Multi-scan function • Programmable call • Programmable VFO • Offset and repeater reverse switches • Multi-function backlit DTMF microphone supplied • 13.8V DC @ <6A • 5.5" w x 1.5" h x 6.3" d, 2.4 lbs **\$449.99**

Available Accessories:

KQ78 CTCSS decoder, MB201 Mobile bracket, PG2N DC cable, SP50B External mobile speaker



DUAL BAND UHF/VHF MOBILES

High performance mobiles that receive three bands simultaneously (with optional band unit) with triple display. Available detachable front panel and wireless remote control functions (external DTMF signal) add versatility. • Selectable frequency step • Built-in DTSS selective calling with page • 101 memories/memory bank system • Flexible scan and scan stop modes • Tone alert with elapsed time indicator • Triple repeater functions • S-meter squelch • Separate antenna and speaker terminals, squelch and volume control per band • Automatic band change • Sub-band muting • Date/time display, stopwatch, alarm • On/Off and time-out timers • 13.8V DC @ <11A • 5.9" w x 1.5" h x 6.8" d, 3.3 lbs.

TM-642AD 2M/220MHz (pictured) 144-148MHz transmit/118-174MHz receive and 222-225MHz transmit/215-235MHz receive • 50/10W (2m); 25/10W (220MHz) **\$739.99**

TM-742AD 2M/440MHz 144-148MHz tx/118-174MHz rx and 438-450MHz tx/410-438MHz rx • 50/10W (2m); 35/10W (440MHz) • Looks like TM-642AD except frequency display **\$639.99**

Available Accessories:

DFK3 9' separation display cable kit, DFK4 13' remote cable kit, DFK7 Deluxe 22' remote kit, MJ88 Modular/8-pin adapter, PG2N DC cable, SP50B External mobile spkr, TSU7 CTCSS decoder unit, UT1200 10W 1.2GHz unit, UT2205 25W 220MHz unit (for TM-742AD only), UT4405 35W 440MHz unit (for TM-642AD only), UT50S 50W 6M unit



TM-G707A 144/440MHz FM Dual Band Extra-ordinarily user-friendly with extra-large detachable control panel. 144-148, 430-450MHz transmit; 118-174, 410-524MHz receive • 50/10/5W (VHF); 35/10/5W (UHF) • Detachable control panel with high-visibility amber LCD display • 180 multi-function alphanumeric memories • Multi-scan functions • Priority scan function • Built-in CCTSS encoder and decoder • 1200/9600bps packet ready • Cross band repeater access • Selectable frequency step • S-meter squelch • Time-out timer • Dimmer control • Auto power-off • Multi-function backlit microphone with DTMF • 13.8VDC @ 11A • 5.5" w x 1.5" h x 7.4" d, 2.7 lbs **\$269.99**

Available Accessories:

DFK3C 9' cable kit, DFK4C 13' cable kit, DFK7C Deluxe 22' remote kit, MB201 Mobile bracket, MJ88 Modular/8-pin adapter, PG2N DC cable, PG45 PC interface cable, PGSA Packet data cable, SP50B External mobile speaker, VS3 Voice synthesizer

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& Check Out AES' Latest Additions.

KENWOOD



TM-D700A 144/440MHz Dual Band Data Communicator Fully equipped to complement SSTV, GPS and APRS*. 144-148, 430-450MHz transmit • 118-148, 136-175, 300-524, 800-1300MHz wide band receive (cell blocked) • 50/10/SW (VHF); 35/10/SW (UHF) • Detachable control panel with extra-large backlit LCD and multi-function key display • Backlit microphone with alphanumeric input • Easy-to-use menu system • Advanced APRS-99 features • Built-in 1200/ 9600 bps TNC (AX.25) • DX cluster monitoring • Dual receive on same band for voice and data • 200 alphanumeric memories • 2 call channels • 10 programmable memory scan banks • Built-in CTCSS and 1750 tone burst • Digital Code Squelch (DCS) • DTMF memory • Cross band and fixed band repeater operation • DCS code scan, tone, CTCSS scan • 10-channel program scan • Visual band scope • 13.8VDC @ 11.5A • 5.5" w x 2.4" h x 1.2" d, 0.4 lbs. (control), 5.5" w x 1.2" h x 7" d, 2.6 lbs. (main)..... **\$519.99**

Available Accessories:

MB201 Mobile bracket, MJ88 Modular 8-pin adapter, PG2N DC cable, PG4X 13' extension cable kit, PG5A Packet data cable, SP50B External mobile spkr, VS3 Voice synthesizer



TM-V7A 144/440MHz FM Dual Bander Easy-to-operate control panel with dual-mode, cool-blue, reversible LCD, offering positive and negative displays. Use with a PC, GPS, packet TNC or operate APRS position reporting and message system locally or nationally. Transmit: 144-148, 430-450MHz; receive: 118-174, 410-470MHz • 50/10/SW (VHF); 35/10/SW (UHF) • Data connector and separate automatic digital channel for APRS* • Detachable control panel • Dual receive on same band • Up to 280 multi-function memory channels (180 with 7-character alphanumerics) • Multi-scan functions • DTSS selective calling with page function • Built-in CTCSS enc/decoder • 1200/9600bps packet ready • Friendly operating menu • Automatic band change • Selectable frequency steps • S-meter squelch • Time-out timer • Audible frequency ID • Auto repeater offset (144MHz) • Auto power-off • Backlit multi-function mic with DTMF • 13.8VDC @ 10A • 5.5" w x 1.5" h x 7.4" d, 2.7 lbs..... **\$399.99**

Available Accessories:

DFK3C 9' cable kit, DFK4C 13' cable kit, DFK7C Deluxe 23' remote kit, MB201 Mobile bracket, MJ88 Modular 8-pin adapter, PG2N DC cable, PG4S PC interface cable, PG5A Packet cable, SP50B Ext. mobile spkr, VS3 Voice synthesizer

MFJ

MFJ ENTERPRISES, INC.



LOW POWER SINGLE BAND SSB MOBILES

No microprocessor – turn on and tune in. • 20W PEP (less on VHF models) – plus Constant Current™ syllabic speech processing for an added 4-6dB advantage • Includes handheld dynamic microphone • 3A from 12V supply or battery • Low noise preamp and active double balanced mixer front end • Sharp 2.3kHz SSB crystal ladder filter reduces pass-band noise and fights QRM • TVI protection • Real S-meter • Agile tuning – reduction drive analog VFO – scan band quickly, zero in smoothly • Amp jack • 2.5" h x 6.5" w x 6" d, 2 lbs.

9402X 2M SSB Adventure Radio™, 7W.. **\$269.99**

9406X 6M SSB Adventure Radio™, 10W **\$249.99**

9410X 10M 20W Adventure Radio™..... **\$239.99**

Available Accessories:

1770A 10M dipole for 9410X, 4110 Portable AC power supply, 4114 Rechargeable power pack, 416 CW adapter, 971 200W HF tuner (9410X only)



VHF DATA RADIOS

Don't tie up your expensive rig on a single packet channel, check out these low-cost MFJ Data Radios.

8621 PacketOnly™ 2m Transceiver Compatible with all TNCs with hardware DCDs and most TNCs with software DCDs • 1200/9600 baud • 5W output • Low current drain (15mA on receive and less than 1 amp on transmit) • 5" w x 5" d x 1.5" h • Crystals installed for 145.01MHz **\$139.99**

8621X2 PacketOnly™ 2m Transceiver Ready for APRS use. • Crystallized and aligned for 144.390MHz • 5W output **\$149.99**

Available Accessories:

4110 Portable AC power supply, 5100 Data radio cable (MFJ/TAPR), 5100YH Data radio cable (KPC9612), 5100YV Data radio cable (KAM/KPC3), S106 Open end (6-pin mini Kenwood/Yaesu)

RANGER

Communications, Inc.



SINGLE BAND 6M MOBILE

RC-5054DX All-Mode 6M Transceiver Covers 50-54MHz • 10W CW/AM/FM, 25W PEP SSB • 10 programmable memory frequencies • Programmable repeater offset (splits of up to 2MHz) • ± 2.5kHz receiver clarifier • Noise blanker/ANL circuitry • Programmable receiver scanning for quick search of active frequencies • Includes Up/Down tuning hand microphone • 12V DC • Public address feature • 2.4" h x 7.75" w x 10.75" d **\$269.99**



DUAL BAND MOBILES

RC-2950DX 10/12M Transceiver An old favorite updated with 12M, improved receiver, double FET balanced mixer, surface mount components and improved display lighting. Covers 24.8-24.99, 28-29.7MHz • 25W (SSB), 12W (CW), 10W (AM/FM) • Dual VFO • RIT • Noise blanker • Standard repeater offsets • Programmable tone • Scanning • 10 programmable frequencies • Lockout..... **\$269.99**

RC-2970DX Higher power version. 150W (SSB PEP), 50W (CW/FM/AM) **\$399.99**

FREE ITEMS included with some radios.
See Price Guide for details.

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THIS CERTIFICATE ENTITLES _____

TO MERCHANDISE VALUED AT _____

PRESENTED BY _____

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Email Your Questions to info@aesham.com

AES

RADIOS

59

Metallic Silver

The VX-5R, the world's most popular Triple-Band Hand-Held FM Transceiver, is now available in a beautifully-crafted Silver version: the VX-5RS! With the legendary VX-5R performance flexibility, the stylish VX-5RS is the shining star for Amateur VHF/UHF operation!

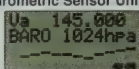


50/144/430 MHz TRIPLE-BAND
HEAVY DUTY FM TRANSCEIVER
VX-5RS
(Silver version)

50/144/430 MHz TRIPLE-BAND
HEAVY DUTY FM TRANSCEIVER
VX-5R
(Black version)

Features

- Ultra Compact: 2.4" x 4.1" x 1.3"
- Aluminum Diecast Case
- MIL-STD 810 Rating
- Optional Barometric Sensor Unit
- 5 W Power Output (430 MHz: 4.5 W)
- AM/Shortwave Receive
- AM Aircraft Receive
- Long Life Lithium-Ion Battery:
7.4 V @ 1300 mAh
- CTCSS and DCS Built In
- Dot Matrix LCD
- Dual Watch
- Spectra-Scope™ Graphical Display
- 220 Memories plus "Home" Channels
- Ten Pairs of "Band Limit" Memories
- Ten Auto-Scan Weather Channels
(North American version)
- 8-Digit Alphanumeric Memory Tags
- Convenient Icon Display Mode
- Smart Search™ Automatic Memory Loading
- Automatic Repeater Shift
- Auto-Range Transponder System (ARTS™)
- Multiple Battery Savers
- Time-Out Timer (TOT)
- Busy Channel Lock Out (BCLO)
- Versatile High-Speed Scanning
- 16-Digit 9-Memory DTMF Autodialer
- One-Touch Emergency Channel
- ADMS Windows™ PC Programmable
- Innovative Multi-Section Antenna
- Full Line of Accessories



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SIXTY METERS AND MORE!

New Upgrades to Our Most Popular Models



**TCXO 0.5 ppm
Included**

ALL MODE
PORTABLE/BASE TRANSCEIVER

60 m Band

FT-897D

HF/50 MHz 100 W/144 MHz 50 W/430 MHz 20 W
20 W (Optional FNB-78 Battery Required)

TCXO DSP



DSP

DIGITAL SIGNAL PROCESSING
Included

ULTRA COMPACT
ALL MODE MOBILE TRANSCEIVER

60 m Band

FT-857D

HF/50 MHz 100 W/144 MHz 50 W/430 MHz 20 W

DSP



**FNB-85 1400 mAh
Long-Life Ni-MH Battery
and NC-72B Charger
Included**

ULTRA COMPACT
ALL MODE PORTABLE TRANSCEIVER

60 m Band

FT-817ND

HF/50/144/430 MHz 5 W



ATAS-25 Manually-Tuned Portable Antenna

The ATAS-25 is a manually-adjusted portable antenna ideal for field use with the FT-817. Designed for mounting on a standard camera tripod (1/4" stud), the ATAS-25 is tuned by sliding the shorting ring of the loading coil up or down and selecting the appropriate number of top sections. Counterpoise wires are supplied.

The ATAS-25 is constructed of high-grade materials for maximum efficiency, and it's the perfect traveling companion for your FT-817!

Freq. Range: Amateur Bands 7-450 MHz
Max. Power: HF/50 MHz: 100 W SSB/CW
(50% Duty, 1 min. TX/RX)

AM/FM: 50 W
144/430 MHz: 50 W
Size: Max. Length 7'3" (2.2 m)
Min. Length for Carrying: 2' (0.6 m)
Weight: 2.1 lb. (930 g)

ATAS MICRO

YAESU
Choice of the World's Top DX'ers

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Get "Back to Basics" with YAESU's New FM Dual Band Mobile One-Touch Operation / Wide Receiver Coverage Included

High Power Output
(50 W VHF/40 W UHF)

Wide Receiver Coverage
Including AM Aircraft Reception,
NOAA Weather Alert Broadcasting* *USA Version

Five One-Touch "Hyper Memory"
Transceiver Configuration Keys

Over 1000 Memory Channels
with Alpha-Numeric Labels,
Twenty Memory Groups

WiRES™ Internet Linking
Compatibility

144/430 MHz
DUAL BAND



ACTUAL SIZE
*Simulated LCD display

YAESU FM Mobile Series

**QUAD BAND
DUAL RECEIVE**

FT-8900R
29/50/144/430 MHz FM QUAD BAND TRANSCEIVER

**DUAL BAND
DUAL RECEIVE**

FT-8800R
144/430 MHz FM DUAL BAND TRANSCEIVER

DUAL BAND

FT-7800R
144/430 MHz DUAL BAND
FM TRANSCEIVER

YAESU
Pioneer of the World's Top Drivers

Vertex Standard
US Headquarters
10900 Walker Street
Cypress, CA 90630 (714)827-7600

For the latest Yaesu news, visit us on the Internet:
<http://www.vxstdusa.com>

Specifications subject to change without notice. Some accessories and/or options may be standard in certain areas. Frequency coverage may differ in some countries. Check with your local Yaesu Dealer for specific details.

NO COOLING FAN COOL AND QUIET 65 W OPERATION

Yaesu's FT-2800M, the most ruggedly-built 2-meter amateur transceiver ever, provides 65 Watts of power along with Yaesu's renowned bullet-proof receiver front end. Direct keypad frequency entry, Alpha-Numeric Memory System, the high power output, and unsurpassed ergonomics make the FT-2800M an operator's dream come true!



New Ultra-High-Dissipation Heat Sink Design

The all-new heat sink of the FT-2800M provides more effective cooling than any other design, allowing long transmission periods without dangerous heat build-up or power reduction due to thermal protection.



High power output, a huge, easy-to-read display, and one-touch WIREST[™] Internet Linking Access capability are yours with the exciting new FT-2800M.

On transmit, the 65 Watts of true FM power output provides you with excellent coverage and superb voice clarity. On receive, you get extended coverage of 134-174 MHz, with a special memory bank dedicated to the NOAA Weather Broadcast Channels (U.S. version only).

Built to the exacting requirements of both the commercial radio industry, as well as the U.S. military's MIL-STD 810, the FT-2800M is constructed using an aluminum diecast chassis/heatsink assembly, providing outstanding mechanical and thermal stability for the internal components.

With superb ergonomics to go along with its stout RF design, the FT-2800M is ready for action, at home or away!

HEAVY-DUTY VHF FM TRANSCEIVER

FT-2800M



ACTUAL SIZE

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<http://www.vxstdusa.com>

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YAESU
A Leader in the World's Top DXers

Vertex Standard
US Headquarters
10900 Walker Street
Cypress, CA 90630 (714)827-7600



SINGLE BAND MOBILE

FT-2800M 2M FM Transceiver Cool, quiet, and ruggedly-built; utilizes a new ultra-high dissipation heat sink design that eliminates the need for a cooling fan. • 6S/25/10/5W (memory storable) • Direct keypad frequency entry with a backlit mic that includes a 9-memory, 16-digit, DTMF autodialer and 4 user-programmable "soft" keys • Advanced track tuning RF input filtering • Huge alphanumeric channel display • Ergonomic, impact-resistant, MIL spec design (MIL-STD 810) • CTCSS encode/decode and SmartSearch™ auto memory loading • Versatile scanning features a choice of scanning-resume option along with a "preferential" list • WX channels with "Severe Weather" alert (10 weather memories) • WIRES™ internet linking access • 6.3" w x 2.0" h x 7.3" d, 4 lbs **\$159.99**

Available Accessories:

MLS100 Mobile speaker, S8002051 Mobile bracket, S8101436 DC cable



DUAL BAND MOBILES

FT-7800R 50/40W 2M/440MHz FM Mobile Designed for simplicity of operation along with a high performance receiver section. Ideal for simplex, repeater, or satellite operation on both bands, without the need for cross-band repeat capability. • 144-148, 430-450MHz transmit • 108-520, 700-999 MHz (cell blocked) receive • N.O.A.A. weather alert • 1000+ memory channels • One-touch operation via five "hyper memory" buttons • Illuminated keypad and microphone keys • WIRES™ capability • 5.5" w x 1.6" h x 6.6" d, 2.2 lbs **\$279.99**

Available Accessories:

CT39 Packet cable, MLS100 Mobile speaker, MMB60 Quick release mobile mount, YSK7800 Remote separation kit



FT-8800R Dualband FM Mobile Transceiver With easy operation, outstanding receiver performance, and crossband repeat capability, the 8800R is the new standard of comparison! • 144-148, 430-450MHz transmit • 108-520, 700-999 (cell blocked) wide frequency coverage (keep informed in the public safety, commercial, aircraft, and government ranges) • Independent 2-channel operation – dual receive with one band as the main TX/RX band • Separate volume and squelch controls for each band • Ability to configure 8800R for VHF-VHF or UHF-UHF operation • 50W on 144MHz, 35W on 430MHz • Over 1000 memory channels, 512 "regular" on each band, five "Home," ten sets of band-edge memories on each band, and six "Hyper Memories" (complete sets of transceiver configurations) • Large, easy-to-read OmniGlow™ LCD with 4 illumination levels • Cross-band repeat capability • One-touch band pattern • CTCSS/DCS (50/104 tone) • User-programmable mic keys • Convenient remote-head mounting capability (optional kit required) • 5.5" w x 1.6" h x 6.6" d, 2.2 lbs **\$369.99**

FT-8900R Quad Band FM Mobile National or world-wide FM communications from a vehicle! • 28-29.7, 50-54, 144-146, 430-440MHz tx • 28-29.7, 50-54, 108-180, 320-480 and 700-985MHz (cell blocked) wide frequency receive • 50W (10/6/2M), 35W (430MHz) high power output • FM satellite operation • Over 800 memories • DTMF auto-dial memory • One-touch band-pattern "Hyper-Memory," allows set up and storage of complete transceiver configuration settings. Saves button pushing! • CTCSS/DCS encode/decode • SmartSearch™ auto memory loading • Cross band repeat • Independent, 2-channel, dual receive and full duplex (separate volume and squelch controls, as well as S-meters) • Built-in duplexer • WIRES™ compatible • RF squelch • Auto repeater shift • ARTS™ capable • User-programmable microphone keys • Easy set up for FM satellite operation • Battery voltage meter • Time-out timer • Automatic power off • Large, easy-to-read LCD display • 1200/9600 bps packet • Thermal-sensored cooling fan • Remote head mounting capability • Looks similar to FT-8800R • 5.5" w x 1.6" h x 6.6" d, 2.2 lbs **\$419.99**

Available Accessories:

ADMS2H Programming software (8900R), ADMS2I Programming software (8800R), CT39 Packet cable, MLS100 Mobile speaker, MMB60 Quick release mobile mount, MMB62 Remote control panel bracket, T9021810 DC cable, YSK8900 Remote separation kit



KURANISHI

BR-200 Standing Wave Analyzer Measures SWR, impedance and determines the resonant frequency (and other properties) of an antenna system. Take

it right to the antenna Works without the

need for a separate transmitter, or other equipment. The compact, single-unit design makes it easy to evaluate HF and VHF antenna system performance by yourself, and its intuitive displays make antenna adjustments quick and accurate. Wide-band, covers systems from 1.7-180MHz. Built-in frequency counter for direct frequency readout. Precision 50Ω dummy load included. Low current drain, typically works for 14 hours using 6 AA's (not supplied). Small and easy to handle: 3.25" w x 6.75" h x 2.5" d, 1.8 lbs (including batteries) **\$389.99**

VECTRONICS



DUMMY LOADS

DL-300M Dry Dummy Load Simulates an accurate 50Ω antenna up to 150MHz. Test or tune up your transmitter without radiating a signal on the air. Power handling curve rated at 300W for 15 seconds, to 100W for 40 seconds. VSWR <1.3:1 at 150MHz. 5" h x 2" d x 2.875" h, 8 oz. **\$44.99**



DL-650M Dry Dummy Load (left) Good all the way up to 650MHz. Power handling curve is rated at 1500W for 10-seconds, down to 100W for 10 minutes. VSWR <1.3:1 at 500MHz **\$74.99**

DL-2500 High-Power Dry Load (right) A fan cooled heavy-duty load for up to 150MHz. Power handling curve rated at 2500W for 1 minute, down to 500W for 10 minutes **\$179.99**

SWR/POWER METERS

PM-30HF Similar to pic. RMS or PEP forward and reflected power and SWR simultaneously. Lighted cross-needle meter. Covers 1.8-60MHz, 300/3000W ranges. 5.313" w x 3.5" h x 5.75" d, 1.2 lbs. **\$79.99**

PM-30UV (shown) Same features as the PM-30HF, but covers 144, 220 and 450MHz bands.... **\$89.99**



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AES

RADIOS

65

Coaxial Dynamics



ELEMENTS
WORK IN
BIRD METERS!

RF DIRECTIONAL WATTMETERS

81000-A RF Directional Wattmeter Accurate RF Power measurement in 50Ω coaxial systems. Uses an internal line section and "Quick Match" plug in elements in the range of 0.1–10,000 watts full scale, and from 0.45 to 2300MHz.

Simply plug in the appropriate measuring element and select forward or reflected direction. Measured average RF power is indicated directly on the large 4.5" "taut-band" meter with three scale display. The meter is also mirrored and shock mounted to provide the most reliable and accurate readings.

Strong shock-proof housing. With SO-239 connectors (Type-N female Special Order) **\$260.99**

83000-A RF Peak Reading Wattmeter Similar in appearance and operation to the standard Model 81000-A wattmeter. Contains an amplifier which allows measuring of both Average and Peak Envelope Power (PEP) with the flip of a switch. Internal 9V battery is required and supplied for peak reading mode **\$393.99**



ALAN BROADBAND ZAP-CHECKER

Broadband Field Strength Bug Detector A wide-band (10MHz to 4.5GHz) receiver that provides visual indications of the presence or RF energy.

Sensitive, detects 2.4 GHz bugs at 40 feet. Analog meter and LED displays, for viewing at a distance and at nighttime. Silent vibrator mode for in-pocket detection and hands-free operation. Use for bug detection, wireless, aircraft maintenance, health/environmental and ham radio. Detects and measures, cell phone radiation, microwave ovens, computer wireless devices, microwave data transmissions, covert surveillance cameras and bugs, radiating computers and electronic games, and background radiation levels - ambient TV and FM. 2" w x 5" h, 5 oz. **\$89.99**



DAIWA Industry Co. Ltd.



CROSS NEEDLE SWR/POWER METERS

CN-101 Covers 1.8-150MHz, rated at 1500W from 1.8-60MHz and up to 1000W at 144MHz. Shows Forward and Reverse power and VSWR simultaneously. Three power ranges: 15/150/1500W (RMS or PEP); ±10% of full scale accuracy. SWR detection sensitivity: 4W minimum. 50Ω impedance, SO-239 connectors. 6" w x 3" h x 3.875" d, 1.5 lbs ... **\$99.99**

CN-103M Same as CN-101, but covers 140-525MHz and rated at 200W. Two power ranges: 20/200W (RMS or PEP) **\$99.99**



PROFESSIONAL SERIES

The CN-801 series of cross needle meters features the most accurate meter and largest meter face in the Daiwa line.

The large, easy-to-read meter has .5W increments and is lighted. This is truly a professional quality meter. • 5W SWR detection sensitivity (min.) • 50Ω impedance • 6" l x 4" h x 4.5" w • 2.2lbs

CN-801H 1.8-200MHz, 20/200/2kW **\$149.99**

CN-801V 140-525MHz, 20/200W **\$154.99**

CN-801S 900-2500MHz, 2/20W, Type-N connectors **\$239.99**



VANCO™

LOW COST METERS

SWR-1 Field Strength or SWR Meter (left) Range: 3.5-150MHz, Impedance: 52Ω, SWR: 1:1-3:1, Accuracy: 5%, Meter sensitivity: 300uA. 5" RF pickup antenna. 6" h x 2" w x 2.875" d, 14 oz. ... **\$19.99**

SWR-3 SWR Meter (right) Range: 1.7-30MHz • Impedance: 50-52Ω • SWR: 1:1-3:1 • Accuracy: 5% • Sensitivity: 300uA • 2.5"x3.5"x3", 6oz. **\$14.99**



370052 Digital Multi-Meter 3.5 digit LCD, 0.5" h with polarity • DC volts, 5 ranges: 200mV-600V • AC volts: 200V and 600V • DC current (5 ranges): 200uA-10A • Resistance (5 ranges): 200Ω-20kΩ • Diode test: forward voltage drop • Transistor test: shows hFE value • Comes with 100-hour, 9V battery and plug-in test leads • 2.76" w x 4.96" h x 0.94" d, 6oz **\$19.99**

Bel MERIT

DX-405 Multi-function Multi-meter 10 functions/39 ranges • 3.5 digit, manual ranging • Frequency meter, to 20MHz • 0.25% DCV basic accuracy • Measure voltage, current, resistance & diode • Continuous beeper • Data hold • Auto power off • Input warning • Tilt stand with holder • Holster • 4" w x 7.5" h x 1.5" d, 1.5 lb. **\$69.99**

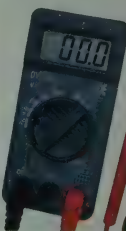


DM-80 Pocket Digital Multimeter 3200 count • 32 segment bargraph • Auto/manual ranging • Auto off • Data hold • Range • Voltage, AC/DC 450V • Resistance, 30MΩ • Diode test • Continuity beeper • Over range indication • Low battery mark • Auto polarity • Carrying case • 2" w x 4.1" h x 0.4" d, 3.2 oz. **\$29.99**



VELLEMAN

DVM-810 Digital Multimeter Compact design makes this meter a perfect fit for any toolbox or even shirt pocket! It features multiple functions and an easy-to-read LCD display. • 3.5 digits • 19 ranges • Measures voltage, current, resistance, transistor and diode • Battery included **\$9.99**



DIAMOND ANTENNA



SWR/POWER METERS

(left) Five models measure power and SWR with 5-10% of F.S. accuracy. Illuminated meter, sensor switch, LED indicator. Power ratings for intermittent operation. For continuous, ratings vary with frequency. SO-239 connectors on all except SX-1000 (type-N). 6" w x 2.5" h x 4" d, 2 lbs.

SX-100 1.6-60MHz, 30/300/3kW PEP... **\$134.99**

SX-200 1.8-200MHz, 5/20/200W PEP **\$94.99**

SX-400 140-525MHz, 5/20/200W PEP... **\$114.99**

SX-600 Dual band, 1.8-160MHz and 140-525 MHz, 5/20/200W PEP ranges **\$169.99**

SX-1000 Dual band, 1.8-160MHz and 430-1300MHz, 5/20/200W PEP ranges **\$214.99**

CROSS-NEEDLE SWR/POWER METERS

(right) Indicate forward/reflected power and SWR simultaneously. 50Ω impedance, SO-239 connectors, 10% F.S. accuracy, 3.3" w x 3.4" h x 3.7" d, 9 oz.

SX-20C 3.5-30/50-54 and 130-150MHz ranges; 30/300W. Needs 5W minimum for VSWR. **\$89.99**

SX-40C 144-470MHz (220MHz with correction factor); 15/150W (3W minimum power)... **\$79.99**

MFJ 1.8-170 MHz



259B \$239⁹⁹

269 SWR Analyzer

E-X-P-A-N-D-E-D Frequency Coverage & Added Features

1.8-170 MHz plus 415-470 MHz

Looks nearly identical to, and has all the features of the 259B PLUS...

- Covers 1.8 to 170 MHz plus 415 to 470 MHz
- Built-in CoaxCalculator™ – calculates coax length in feet given coax length in electrical degrees and vice versa, and any velocity factor (great for building matching sections and phasing lines for multiple antennas).
- New 12-bit A/D converter gives much better accuracy and resolution than common 8-bit A/D converters.

New 1.8 to 170 MHz Range features:

- Read Complex Impedance as series equivalent resistance and reactance ($R_s + jX_s$) or as magnitude (Z) and phase (degrees). Also reads parallel equivalent resistance and reactance ($R_p + jX_p$).
- Measure SWR and loss of coax with any characteristic impedance from 10 to over 600Ω, including 50, 51, 52, 53, 73, 75, 93, 95, 300, 450Ω.

415 to 470 MHz Range features:

- Read SWR, return loss, reflection coefficient simultaneously, and cable loss in dB and match efficiency.
- Has LCD logarithmic SWR bargraph and SWR meter for quick tuning.

269 \$319⁹⁹

www.mfjenterprises.com

MFJ SWR Analyzers

... for Serious Antenna Performance!

You've spent a lot of time and money on your antenna system, so why not make sure it's giving you top performance? An MFJ SWR Analyzer will do that – plus, it will make you very popular because all of your Ham buddies are going to want to borrow it!

The MFJ 259B and 269 are complete Ham radio test stations, including – Frequency Counter, RF signal generator, SWR Analyzer, RF Resistance and Reactance Analyzer, Coax Analyzer, Capacitance and Inductance Meter & more!

The 259B and 269 can take the frustration out of tuning your antennas for maximum performance. Gone are the days of using a conventional, sometimes questionable, SWR meter. You will no longer have to drag your rig (RF source) out into the yard. No more running in and out of the house or up and down the tower to make those seemingly endless readings and adjustments.

The 259B and 269 are self-contained and fully portable units, with built-in battery power and RF source so you can take it right to the antenna. Take one reading to get a complete picture of your antenna, and make tuning adjustments on the spot.

Operation is simple, just connect the feed line, set the bandswitch and tune the dial – just like a transceiver. All information is clearly displayed instantly on the large, easy-to-read, two-line LCD screen and side-by-side meters.

When tuning transmission lines or making up phasing harnesses for stacking antennas, you can quickly determine exact 1/4 or 1/2 wavelengths. You can also determine the velocity factor, coax cable loss, length of coax and distance to a short or open in coaxial cable.

Read SWR, return loss and reflection coefficient at any frequency, simultaneously, or inductance and capacitance at RF frequencies at a glance.

The 259B and 269 operate on 110V with the 1312D adapter (\$14.99) or on 10 "AA" internal batteries, not included. For rechargeables, there is a built-in charger, MFJ's 1312D required.

All metal cabinet, 6-3/4" h x 4" w x 2" d.

Overall, here's what you can do...

- Read antenna SWR & Complex Impedance from 1.8-170MHz with the 259B and additionally 415-470MHz with the 269. Complex Impedance can also be read as series resistance and reactance ($R + jX$) or as magnitude (Z) and phase (degrees).
- Find true resonant frequency of antenna.
- Trim dipoles and verticals to resonance.
- Adjust your Yagi, quad, loop and others. Change antenna spacing and height – watch SWR, resistance and reactance change instantly.
- Perfectly tune critical HF mobile antennas in seconds for top performance – without subjecting your transceiver to high SWR.
- Measure your antenna's 2:1 SWR bandwidth on one band, or analyze multiband performance over the entire spectrum.
- Check SWR outside the ham bands without violating FCC rules.
- Adjust your antenna tuner for a perfect match without creating QRM.
- Take the guesswork out of building and adjusting phasing lines, matching networks and baluns.
- Accurately measure distance to a short or open in a failed coaxial transmission line. Measure the length of a roll of coax and also determine loss, velocity factor and impedance.
- Measure frequency with built-in counter.
- Frequency counter function.
- Troubleshoot and measure resonant frequency and approximate Q of traps, stubs, transmission lines, RF chokes, tuned circuits and baluns.

SWR Analyzer Accessories

29C Carrying Case – Tote your 259B anywhere with this custom carrying case. Wear it around your waist, over your shoulder, or clip it onto the tower while you work. Has back pocket for carrying dip coils and coax adapters. Special foam filled fabric cushions blows and protects unit from wear and tear. **\$24.99**

39C Carrying Case – Fits the 269. **\$24.99**

66 Dip Meter Adapter – For grid dip operation. Set of two plug-in coils covers 1.8-170MHz range. **\$19.99**

98 Accessory Pack – Includes 39C case, 66 dip adapter and 1312D AC adapter. **\$54.99**

99 Accessory Pack – Includes 29C case, 66 dip coils and 1312D AC adapter. **\$54.99**

99B Accessory Pack – Includes 10 "AA" NiMH batteries, 29C case, 66 dip coils and 1312D AC adapter. **\$77.99**

99C Accessory Pack – Includes 10 "AA" NiMH batteries and 1312D AC adapter. **\$34.99**

731 Tunable Measurement Filter – Use with 259B or 269 for accurate measurements in the 1.8-30 MHz range while in the presence of strong RF fields from nearby broadcast stations or other RF emitters. **\$89.99**



92AA01
1300mAh AA Ni-MH
Battery...ea. **\$2.99**

92AA10
10 Pack.... **\$24.99**

SWR/POWER METERS

864 (bottom) Covers 1.8-60MHz, 144MHz and 440MHz bands. Dual sensors – connect an HF and VHF/UHF rig at the same time. Monitor SWR and power of either. Lighted Cross-Needle meter indicates 30/300W forward and 6/60W reflected power simultaneously. Uses 12V DC for meter light. 7.25" w x 2.5" h x 2.25" d **\$84.99**

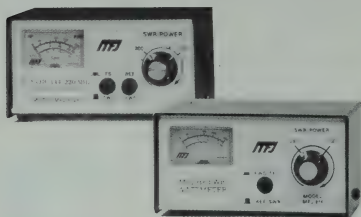
862 (middle) Similar to 864, but for 144MHz, 220MHz and 440MHz. Ranges: 30/300W forward and 6/60W reflected. 5.75" w x 2.5" h x 2.25" d... **\$54.99**

860 (top) Similar to the 864, but covers HF 1.8 to 60MHz. Ranges: 30/300W forward and 6/60W reflected. 4.5" w x 2.25" h x 3" d **\$44.99**



815B Features large 3 in. Cross-Needle meter for accurate SWR and peak or average power readings from 1.8 to 60MHz. Ranges: 200/2000W forward and 50/500W reflected. Push button selection. 12V DC meter light. 7.25" w x 2.5" h x 2.25" d ... **\$79.99**

817 Looks and features similar to 815B but covers 144/440MHz bands. Ranges: 200/20W forward and 50/5W reflected. 7.25" w x 2.5" h x 2.25" d... **\$89.99**



812B (top/left) Indicates forward and reflected power on 2M/220MHz and SWR from 144-220MHz, plus field-strength from 1-220MHz. Power ranges: 30/300W. 4.5" w x 2.25" h x 3" d..... **\$34.99**

816 Toroidal Meter (bottom/right) Indicates forward and reflected power from 1.8-30MHz. Power ranges: 30/300W. 4.5" w x 2.25" h x 3" d..... **\$34.99**



844 VHF/UHF SWR/Power Meter Covers 144 and 440MHz, rated up to 200W. Easy to read multi-colored meter shows SWR/POWER in three ranges: 15, 60, and 200W. Insertion loss is 0.3 dB or less. Measures only 3.75" w x 3" h x 1.25" d – great to take along for portable, HT or mobile rigs **\$69.99**

GrandMaster™ 3.25" x 1.25" meter, forward/reflected. 3 ranges. 13.8V/110V. 7.5" w x 3.125" h x 4.25" d.

870 (HF range) Covers 1.6 to 60MHz. Power ranges: 30/300/3000W **\$124.99**

872 (HF/VHF range) Covers 1.8 to 200MHz. Power ranges: 5/20/200W **\$94.99**

873 (VHF/UHF range) Covers 125 to 525MHz. Power ranges: 5/20/200W **\$104.99**

874 (HF/VHF/UHF range) Covers 1.8 to 525MHz. Power ranges: 5/20/200W **\$159.99**



267 Precision SWR/Wattmeter with Dry Dummy Load 3", lit, cross-needle meter shows true-peak, average forward/reflected power and SWR. • 1.8-54MHz • 300/3000W forward, 60/600W reflected – SWR 1:1 to 8:1 • Load-to-antenna switchable. 50Ω dummy load rated at 100W (10 min.) or 1.5kW (10 sec.). • Usable up to 60MHz • SWR 1.3:1 @ 30MHz. 12VDC lamp or 120VAC with 1312D or 9V battery. Aluminum, perforated. 4" w x 3.125" h x 10" d..... **\$139.99**



FIELD STRENGTH METERS

801 Super Compact Field Strength Meter (right) You can read relative field strength from your antenna, measure antenna performance and discover how strong your antenna field is. Its compact size fits in the palm of your hand, only 2.375" w x 3.625" h x 1" d. Telescopic whip included... **\$19.99**

802 Bipolar Field Strength Meter (left) Dual whips are included. 2.375" w x 4" h x 1.5" d..... **\$39.99**



MISCELLANEOUS

850 Line Voltage Monitor (left) Plug into any 110V AC outlet and monitor the line voltage on an expanded/colored 95 to 135V AC scale. Measures 2.25" w x 2.25" h x 1.5" d **\$19.99**

204B Antenna Bridge (right) Quickly optimize 1.8-30MHz antennas for peak performance. Portable. Determine if an antenna is too long or short, measure resonate frequency and resistance to 500Ω. Built-in resistance bridge, null meter and oscillator driver. Requires 9V. 4" h x 2" w x 2" d..... **\$79.99**



224 2M FM Signal Analyzer™ Measure signal strength over 60dB range, antenna gain, beamwidth, front-to-back ratio, sidelobes, feed-line loss. Check and set FM deviation. Plot field strength patterns, position antenna, measure preamp gain, tune transmitters and filters. Scope to analyze modulation wave forms, measure audio distortion, noise and peak deviation. Covers 143.5-148.5MHz. Headphone jack, battery (9V) check function. 4" x 2.5" x 6.75" **\$149.99**



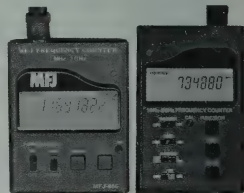
852 Power Line Noise Meter Sensitive (0.3 uV) superhet AM receiver with wide range noise level meter and AGC (over 70dB). Tuned to the 135MHz region. Telescopic, direction-finding dipole antenna is balun isolated and optimized to give a clearly defined null for pin-pointing sources. Plug in headphones and hear the trackable noise or plug in a tape recorder to document offending noise for playback. 9V battery. 2.8" w x 4" h x 1.5" d. **\$89.99**



805 Pocket-Sized RFI Detector Track down and eliminate RFI caused by radiating cables and wires. Simply clamp the top mounted current transformer over suspected cable or wire (up to 1/4 inch diameter) to detect RFI causing common-mode currents. Usable from VLF to VHF. Uses 9V battery. 2.25" h x 4.75" h x 1" d **\$79.99**

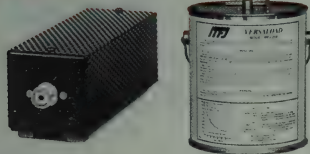
886 Pocket Frequency Counter (left) Covers 1 MHz – 3 GHz • 300MHz direct count with 0.1 Hz resolution • 10-digit LCD • Impedance: 50Ω (VSWR @ <2:1) • Sensitivity: 0.8mV @ 100MHz, 7mV @ 300MHz, 6mV @ 1GHz, 100mV @ 2.3 GHz • 15 dBm input • Synchronous detector • RF signal strength bargraph • 4 selectable gates • 6-hour, rechargeable NiCads • AC adapter • Telescoping antenna • 2.75" w x 3.25" d x 1.25" d **\$109.99**

888 Deluxe Frequency Counter (right) Covers 10 Hz-3GHz • Displays frequency of local signals on 10-digit LCD • RF strength bargraph • Detects 150 MHz signals up to 150' • 300MHz direct count with 0.1Hz resolution • 4 selectable gates • Input: 50Ω (1-3MHz), 1Ω (10Hz-50MHz) • 6-hour NiCad pack • AC wall charger • BNC connector • Telescoping whip • 2.75" x 4.25" h x 1.25" d, 9 oz **\$174.99**



854 RF Current Meter A top-mounted sense coil snaps over wires, cables, etc. up to 1/2" dia. • Measures actual RF currents in antenna elements, ground wires, radials and outside of coax feedlines • Six ranges, 30mA to 3A • Accurate from 1-30MHz • Range with variable sensitivity control • Auto-off press-to-test power circuit • All-aluminum case and G-10 PC board • 2.5" w x 5.5" h x 1.5" d, 11 oz **\$89.99**





DUMMY LOADS

250 Versaload (right) 50Ω oil-filled dummy load providing low VSWR to 400 MHz. Rated at 1 KW CW or 2KW PEP for 10 min., with 50% power rating for 20 minutes and 200W CW (400W PEP) continuous. 7.25" h x 6.625" diameter **With oil \$59.99**

250X Same as above, but requires oil..... **\$39.99**

Dry Loads (left) Air cooled, non-inductive 50Ω resistor mounted in a metal housing. Full rated load for 30 seconds with derating curve to 5 minutes.

260C (HF/VHF) Rated at 300W. 1:1 SWR to 30MHz, .5:1 to 650MHz. 2.5" x 2.5" x 7"..... **\$34.99**

260CN With type "N" connectors..... **\$39.99**

264 (UHF) Performs from 1.3 to 650MHz, usable to 750MHz. Rated at 1.5KW for 10-seconds and 100W for 10-minutes. 3" w x 3" h x 9" d..... **\$69.99**

264N With type "N" connectors..... **\$74.99**

MIRAGE

MP-3 Measures RMS, peak forward and reverse power and SWR, directly without charts or calculations • Negligible insertion loss. • 420-450MHz • 5/50/150W PEP • Removable coupler, SO-239 connectors • Requires 9V or AC adapter • 5.75" x 4.5" w x 5.75" d, 3.5 lbs..... **Closeout \$199.99**



YAESU



YS-60 Monitors average (CW) and peak (SSB) transmitter power and VSWR. Covers 1.8 to 60MHz, up to 2KW. Ranges: 0/200 and 2000W PEP. 50Ω impd., SO-239 connectors. Requires 12V DC for lamps and internal circuits. 4.75" w x 2.75" h x 3.5" d, 1.5 lbs..... **\$129.99**

YS-500 Similar to YS-60, but covers 140-525MHz and has 4/20 and 200W PEP ranges..... **\$109.99**



NOCC-3 Cyclops

Compact™ (top)

At 16 oz, the NO-CC3 night vision monocular boasts a powerful integrated infrared illuminator in one of the lightest bodies available. With easy to use power and IR controls, it's equipped with a 42mm objective operating at a 1:1.2 aperture with 3.1x magnification for quality nocturnal viewing. • 15,000 image tube gain • 628' FOV @ 1000 yards • 575' range of view • 8' to infinity focusing range • 2 AAs • 7.2" x 2.4" x 3.2" • 16 oz... **C/O \$139.99**

NODS-5 Night Owl Discovery Pro™ (bottom) Full-size night vision monocular with highest-grade 48mm camera quality objective lens providing unsurpassed resolution. It features an integrated infrared illuminator encased in an ergonomic body. Equipped with soft-touch controls, power and IR indicators and tripod. • 650' range of view • 5X magnification • 80mm focal length • 524' FOV @ 1000 yards • 10' to infinity focus range • 2 AAs • 7.6" x 3.4" x 2.9" • 1.5 lbs..... **\$249.99**

NONW24-BPHT

NightWave 2.4

Night Vision Optics Compact, easy, light, ergonomic design. Features a 2.4x image magnification that gives you a closer look at distance objects in dark environments. Perfect for short range night time viewing. A built-in infrared illuminator aids viewing in dark rooms. Soft touch, on/off and I/R buttons. Operates with two AAA batteries. 5.5" l x 1.9" w x 3" h, 9.2 oz..... **\$159.99**

NOXG-2 Explorer

G2™ Cutting edge, with a technologically advanced night vision intensifier tube. Gives superior brightness and performance in low light conditions, and up to 2,300' long range of view. Compact, 100% waterproof – floats! Equipped standard with a powerful integrated infrared illuminator. • 3.0X magnification • 612' FOV @ 1000 yards • 8' to infinity focusing range • Uses 3V lithium battery • 6.8" x 2.3" x 3.3" • 1.3 lbs.. **\$999.99**

ACCESSORIES

NOCA-42 Camera Adapter™ (left) Allows photography with 35mm SLR cameras. Replaces rear ocular lens. Requires opt. T-mount adapter..... **\$39.99**
NOLD-20 Lens Doubler™ Increases magnification on the NOCC-3 enabling close-up viewing in the dark. Fits in front of objective lens.... **C/O \$29.99**



TELESCOPES

0705-04-01 ETX-70AT 70mm Achromatic Refractor (right) Portable for birdwatchers or naturalists. Observe major planets easily. • 2 eyepieces (MA 9mm/39x, MA 25mm/14x) • Multi-layer coated, tube assembly (D=70mm, F=350mm f/5) • Internal flip-mirror for either straight or 90° observing • Fork mount – electric slow motion controls, setting circles and axis locks • Electronic control panel • 9-speed, dual-axis motor drive with Autostar™ control • Side-real-rate tracking • Requires 6 AAs • Includes tripod • 7 lbs..... **\$319.99**

3514-03-20 ETX-90AT 90mm Maksutov-Cassegrain (left) Ultraportable • 8x25mm right-angle viewfinder • Series 4000 Super Plossl 26mm eyepiece (1.25") • Super multi-coated optical tube assembly (D=90mm, F=1250mm f/13.8) • Internal flip-mirror for straight or 90° observing • Fork mount with electric slow-motion controls, setting circles and locks on both axes • Electronic control panel • 4-speed, dual-axis motor drive with Autostar control • 8 AAs needed • Tripod • 19 lbs **\$599.99**

0515-03-20 ETX-125AT 138mm Maksutov-Cassegrain Same as above with D=127, F=1900mm f/15 optical and 8x25mm right angle viewer. Includes AutoStar controller and tripod. **\$999.99**

20201 NGC-60 Refractor Includes built-in AutoStar computer control system and manual slow-motion controls. • 60mm (2.4") diameter, f/11.7 ratio, 700mm focal length • Self-guided "go-to" control system, 1400-object database • Altazimuth mount with slow-motion control • MA25mm and MA9mm 1.25" eyepieces • 5 x 24mm viewfinder • Hybrid diagonal • StarNavigator software • Adjustable sliding aluminum tripod with accessory shelf • Requires 2 AA batteries (not included). **\$199.99**

20117 DS-2114-ATS Reflector The Meade AutoStar control has the lead in automated scope technology. Includes 9-speed controller and "go-to" capability to over 1400 objects. With internalized motors, cords, gears and battery compartment. • 114mm (4.5") diameter • f/8.8 ratio • 1000mm focal length • 2" focuser • Streamlined, single-time fork altazimuth mount for smoother motions in altitude/azimuth • MA25mm and MA9mm 1.25" eyepieces • 1.25" and 2" holders • 6 x 30mm view finder, rubber eyecup • StarNavigator software • Quick release, adjustable aluminum tripod..... **\$399.99**



The Dobsonian reflector telescope is a relatively recent design that places all the performance of the Newtonian reflector design on a simple altazimuth mount. Celestron's Dobsonian design, the Star Hopper®, is great for beginners because it's very

easy to use and quite economical, yet has advanced features even an experienced observer will appreciate. • Glossy aluminum tube • BK-7 optical quality glass • Azimuth surface provides dozens of support points for smooth swivel motion • Variable tension clutch system for proper balance and smooth azimuth control • 9x50 Finder scope and quick release bracket • 2" focuser with 1.25" adapter • Variable tension altitude clutch with handle • Azimuth roller track bearing

10800 StarHopper® 8 8-inch (200mm) diameter Dobsonian • 1200mm focal length (f/6) • 25mm Plössl eyepiece, 1-1/4" (48x) **\$399.99**

10110 StarHopper® 10 10-inch (250mm) diameter Dobsonian • 1250mm focal length (f/5) • 32mm E-Lux eyepiece, 2" (39x) • Cooling fan ... **\$549.99**

10112 StarHopper® 12 12-inch (300mm) diameter Dobsonian • 1500mm focal length • 32mm E-Lux eyepiece, 2" (47x) • Cooling fan..... **\$999.99**



Take the best of the NexStar 5 and 8 to the next level with the 5i and 8i. Equipped with the electronic hand control, they allow manual slew across the sky in seconds or tracking of a star as the Earth rotates. The control also offers movement of the scopes at six different rates and has a "double button" feature to increase slew speed without changing rates. Put the power of the newest software and expanded 40,000 object database to work with the optional computerized hand control. Capable of becoming fully automatic GPS scopes with optional GPS accessory and computerized hand control.

11033 NexStar 5i Standard features include • 5" (127mm) diameter, 1250mm focal length, f/10 focal ratio • 60°/sec. slew • Fully enclosed HD high speed motors • Battery compartment for 8 AA's • Star-bright™ coated, Schmidt-Cassegrain optics • Multi-coated, 1.25"/25mm Plössl eyepiece (50x) • StarPointer finderscope • 1.25" star diagonal • Auto-Guider port • Auxiliary port for accessories • Heavy-duty base with rubber feet..... **Closeout \$899.99**

11022 NexStar 8i Same features as 5i with • 2032 mm focal length, f/10, 8" (203mm) dia. • Multi-coated, 1.25" Plössl eyepiece (81x) **\$1379.99**



SMA eyepiece (81x), Star diagonal and visual back • Fork mount and wedgepod • 41 lbs **C/O \$999.99**



• 2000mm focal length (f/10) • 5-step multi-layer StarBright™ coatings • 40mm NexStar Plössl (50x) • 9x50 finderscope • Fastar compatible • External 12V DC • AC adapter..... **\$2169.99**



numerous, user-defined objects. It also features database filter limits for creating custom lists. Built with dual aluminum fork arms with carrying handles and a receptacle for computer go-to control. 279mm (11") dia. Schmidt-Cassegrain • 2800mm focal length • f/10 ratio • Premium 40mm (70x) 1.25" Plössl eyepiece • 9x50 finderscope • 9 slew speeds • Star diagonal • Visual back • RS232 and multiple data ports • AC adapter • Adjustable, 26-pound tripod • 65 lbs **\$3224.99**



than 60mm. This short-tube, 400mm focal length, refractor telescope has 16x (25mm) and 40x (10mm) magnification, 1.25" SMA eyepieces. • 80 mm (3.1") dia. • f/5 ratio • "Go-to" computer hand control • StarPointer™ finderscope • 1.25" star diagonal • The Sky Level I CD • Adjustable aluminum tripod, accessory tray • 11 lbs..... **\$349.99**

11015 Celestar 8 Engineered for optical performance in an affordable, full-featured Schmidt-Cassegrain scope with large enough aperture to do serious deep-sky observing. Features: 8" (203mm) aperture • 2032mm focal length • f/10 focal ratio • 6x30 finderscope • Standard 1.25" accessories including 25mm

21016

Advanced C4-R Designed for the more advanced astronomer, it features exquisite optics on a heavy-duty equatorial mount. The optics are made to exacting standards, with high quality materials to ensure top performance. Offers a 63% increase in image brightness over 80mm models, with the larger aperture delivering incredible images of the moon, Saturn and its ring structure, Jupiter and its belts, and hundreds of deep-sky objects; including galaxies, nebulae and star clusters • 102mm refractor • 1000mm focal length (f/10) • Mount with setting circles and slow motion cable • 6x30 finderscope • 20mm (50x) 1.25" plossl eyepiece • Adjustable aluminum tripod and accessory tray **\$399.99**

21019

C6-R Achromatic Refractor An excellent choice for the serious astronomer, the C6-R is the largest telescope in its class with over 6 times the light gathering ability of a 60mm. It features premium accessories such as a heavy duty CG-5 German equatorial mount, 9x50 finderscope with bi-directional alignment screws and a spring loaded pivot support, 20mm (60x) Plössl 1.25" eyepiece, 2" focuser and 2x Barlow with photo adapter. The new German Equatorial mount has precision worm gears on both axes for extremely smooth stability. It also has a convenient latitude scale for easier alignment and an optional polar finder scope for precision alignments. A NEW heavy-duty tripod with more substantial legs offers excellent damping characteristics. • 150mm (6.0") refractor • 1200mm f/8 focal length • Right ascension and declination setting circles • Slow motion control knobs on both axes • 1.25" star diagonal • The Sky I CD • Accessory Tray • 57 lbs **\$849.99**



22062 NexStar 60GT Views of the lunar landscape, phases of Venus, Mars resolved as a disc, Jupiter and its moons, Saturn with its rings plainly visible, some deep sky objects, plus terrestrial views. Comes with a fully-computerized hand control with database of over 4,000 objects. Includes three 1.25" eyepieces (35x, 70x and 175x). With a pre-assembled, adjustable tripod, the 60GT can be up and ready in a matter of minutes. A StarPointer finderscope with red LED makes centering easy. • 60mm (2.4") dia. refractor • 700 mm focal length • f/12 ratio • 1.25" star diagonal • The Sky Level I CD-ROM • 9.5 lbs **\$249.99**





21052 FirstScope 60AZ (top) All glass components, coated optics and smooth functioning mounts, with the added benefit of slow motion controls on the mount for easy adjustments. • 60 mm (2.4") refractor • 700mm focal length, f/12 • Slow motion control rod for smooth vertical adjustments • Sturdy adjustable aluminum tripod with tray • 1.25" 20mm (35x), 10mm (70x) eyepieces • 1.5x erect image eyepiece • 90° star diagonal (1.25") • StarPointer™ finderscope • Altazimuth mount • The Sky 1 CD • 7 lbs. **\$99.99**

21086 FirstScope 80EQ (bottom) A good choice for the more serious beginning astronomer. The setting circles and slow motion controls allow for greater control in both locating and tracking objects, making this equatorial telescope one you can grow with as your observing interests expand. All glass components, German equatorial mount. • 80mm (3.1") refractor • 900mm focal length, f/11 • Equatorial mount with setting circles and slow motion adjustment cables • Sturdy adjustable aluminum tripod with accessory tray • 1.25" 20mm (45x), 10mm (90x) eyepieces • 90° star diagonal (1.25") • StarPointer™ finderscope • The Sky 1 CD • 18 lbs.. **\$299.99**



31132 NexStar 130GT Computerized hand control provides the ability to auto slew (9 speeds) to any of its 4,000+ database of objects, including over 600 galaxies. View details of the lunar surface, rings of Saturn, polar ice caps on Mars or a number of the Messier objects. Explore fainter objects using the light-gathering, 5" primary mirror, which gives fully color-corrected views. • 130mm (5") Newtonian reflector • 650mm focal length (f/5) • Motorized altazimuth mount • 1.25" 25mm (26x), 10mm (65x) eyepieces • Computerized hand control • StarPointer™ finderscope • NSOL control software for PC • Adjustable aluminum tripod with tray • The Sky 1 CD • 18 lbs..... **\$399.99**

31034 Tabletop 76 Small, but powerful, this ultra portable telescope is ideal for traveling and quick set-up. The handy but sturdy table top mount provides steady viewing. • 76mm (3") aperture • 600 mm focal length • f/8 focal ratio. Standard 0.96" accessories include: 4mm SR (150x), 20mm H (30x) and 2x Barlow eyepieces • 5x24 right-angle Finderscope • 5 lbs **\$99.99**



31044 Firstscope 114 High quality, telescope featuring an optical system for bright, detailed views. The highly stable equatorial mount (CG-3) has setting circles and slow motion controls on both axes providing smooth, easy tracking. Built to provide years of performance, it comes with adjustable, aluminum tripod and accessory tray. • 114mm (4.5") diameter aperture • 900mm focal length • f/8 ratio • StarPointer™ finderscope • 20mm (45x) and 10mm (90x) Kellner eyepieces • 1.25" focuser • 35" optical tube • Enhanced aluminum optical coatings • 1.5" rack and pinion focusing • 45 lbs..... **\$249.99**



31142 NexStar 114GT Computer compatible Newtonian reflector with a compact design and exceptional light-gathering ability. • 114 mm (4.5") diameter • 1000mm focal length (f/9) • StarPointer™ finderscope • 25mm (40X) and 10mm (100X) SMA eyepieces • Motorized mount • Computerized hand controller with "go-to" database. Includes *GuideStar™* software to use with your personal computer, fully assembled adjustable aluminum tripod, battery pack and *The Sky Level 1* CD-ROM... **\$439.99**

LAB GRADE MICROSCOPES

4020 Dissecting Microscope This provides an introduction to the world of microscopy. It uses a 45° inclined, 360° rotatable monocular head which can move up and down on the metal pillar for small or large item viewing. The eyepiece is a 10x-18mm with a 4x-58mm objective, giving 40x power. The all-metal unit comes with a 60mm black-and-white viewing plate and smooth rack and pinion focuser **\$79.99**



pinion focuser with a safety rack stop..... **\$119.99**



electrical illumination with a tungsten 20w bulb and .65 single lens condenser. Powers are 40x, 100x and 400x using the 10x eyepiece **\$199.99**



SPOTTING SCOPES

52200 (top) 60mm Pro Zoom Spotting Scope This powerful spotting scope's large 60mm aperture makes it perfect for bird watching, photography, nature study, hunting or scenic observing. Carefully crafted, multicoated optics provide excellent contrast and clarity, and the standard lens hood reduces glare. Zoom and focus controls are exceptionally smooth, convenient and easy to use. The ability to zoom from 15 to 60 power with speed and precision means you'll be able to focus on and follow interesting subjects with ease. • 24' near focus at 15 power • 15mm eye relief at 15 power • 30° field of view at 15 power **\$199.99**

52211 (bottom) 60mm Wildlife Zoom Spotting Scope A great all-around optic designed to perform well in a range of viewing situations. Great for bird watching, observing nature and long distance spotting. The focus and zoom controls are easy to use and well placed for fast, convenient image acquisition. It offers long eye relief of 33mm at 15 power. With fully coated lenses, it's totally reliable and an excellent performer. • Power range that zooms from 15 to 45 power • Near focus: 42' at 15 power • Field of view: 2.25' at 15 power • Mini table tripod and carrying case included • 25 oz. **Closeout \$169.99**

BUSHNELL

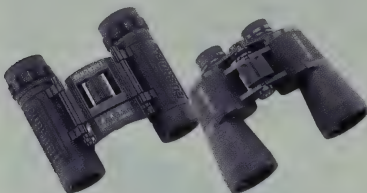


BINOCULARS

Powerview® Truly the "best of both worlds." Contemporary styling and design combined with legendary Bushnell quality and durability. The easy-to-hold and easy-to-use aspect of these binoculars also converge to make Bushnell Powerview binoculars an excellent value for the general and outdoor user. Powerview comes with soft rubber covering and the patented "Insta-Focus" system. Each binocular comes with a neck strap and carrying case.

13-1226 (left) Compact binocular with folding roof prism. Designed in camo. Features include: 12x25 magnification • 240 ft. field of view at 1000 yds. • 2.1mm exit pupil • 9.7oz. **\$29.99**

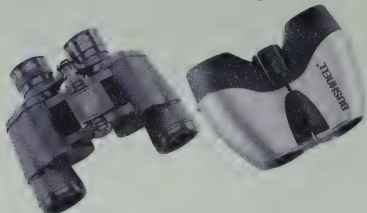
13-0430 (right) LiteVision™ • 4x30 magnification • 650 ft. field of view at 1000 yds. • 7.5mm exit pupil • 7.5oz. **\$13.99**



13-1250 (right) InstaFocus® • 12x50 magnification • Porro prism • 265' field of view (1000 yds.) • 4.2 mm exit pupil • Adapts to tripod • 27oz. **\$59.99**

13-2514 (left) Compact, folding binocular • 8x21 magnification • Roof prism • 375 ft. field of view at 1000 yds. • 2.6mm exit pupil • 7oz. **\$21.99**

Falcon is feature packed and value priced. Perfect for sporting events, sightseeing, nature study, backpacking, concerts and theater. The line includes the Bushnell patented InstaFocus® focusing system, coated optics, carrying case and strap.



13-0721 (right) Compact binocular featuring 7x21 magnification • Porro prism • 340 ft. field of view • 3mm exit pupil • 4.7oz. **Closeout \$19.99**

13-3410 (left) InstaFocus® • 7x35 magnification • Porro prism • 420' field of view (1000 yds.) • 5mm exit pupil • Adapts to tripod • 21oz. **\$29.99**

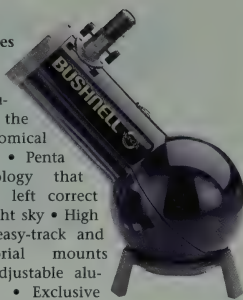


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TELESCOPES

Voyager® Series

Engineered to exacting standards with exclusive features: the first astronomical zoom telescope • Penta mirror technology that yields right to left correct views of the night sky • High quality metal easy-track and metal equatorial mounts • Innovative adjustable aluminum tripods • Exclusive rotary power turret eyepieces.



78-2010 Penta mirror technology that yields right to left correct views • High quality metal easy-track and metal equatorial mounts • Exclusive rotary turret eyepieces • 100 x 4.5" reflector • Focal length: 500mm • 5 and 27mm Plossl eyepieces • Magnification: 18 and 100 • 1.25" format eyepieces • Precision rack and pinion focuser • Convenient shoulder strap • Pre-assembled cradle mount • Camera and tripod adaptability **\$199.99**

TELESCOPE ACCESSORIES

(See Price Guide to match accessories to correct telescope model)

78-0101 1.25", 9mm Kellner **Closeout \$19.99**

78-0102 1.25", 25mm Kellner .. **Closeout \$19.99**

78-0105 1.25" 2x Barlow lens .. **Closeout \$29.99**



MISCELLANEOUS

26-3150 NightVision Binocular (Generation 1) Great for wild-life observation, maritime navigation, security or camping. Built-in infrared illuminator for enhanced images in very low light. Powered by a single CR123A battery. • Magnification x objective lens: 3.1 x 50mm • Range: 1.5 to 400 ft. • 79 ft. field of view @ 100 yds • Includes tripod mount • 7.9" x 6.45" x 2.7", 40 oz. **\$459.99**



78-2061 Spotting Scope Extra power and performance for extended range viewing • Variable zoom eyepiece for great range • Fully coated optics reduce glare and enhance picture clarity • Rugged construction • Compact tripod • Hand carrying case • 20-60x magnification • 60 objective • 70/23 ft. field of view @ 1000 yards (20x), 24/8 ft. (60x) • 3mm (20x) and 1mm (60x) exit pupil • 40 ft. close focus • 20.4", 25 oz. **\$79.99**



Bushnell makes it easy to accurately measure speed with the Speedster™ and the new Velocity™ speed guns. The Speedster™ uses digital technology and digital signal processing to provide accurate real-time measurements to ±1.0mph. It measures the speed of a baseball from 75 feet away and even has a stat-keeping mode. Additionally, the speed of larger objects like racecars can be measured from 1,300 feet. A more simplified, yet equally effective speed gun is the Velocity™ with its point-and-shoot operation. Like the Speedster™, it boasts ±1.0mph accuracy. The Velocity™ can track the speed of a ball from 100 feet. It's the ideal tool for tracking everything from racecars to pitching speeds. Both guns have a 6-110mph range for baseball, softball and tennis. They also range 6-200mph for auto racing.

10-1907 Speedster™ Speed Gun Compact with comfortable pistol grip • 4-row LCD graphics display • Two-way button pad • ±1.0mph accuracy • Displays current, last and average speeds • Tracks baseball statistics for up to 8 pitchers • Operates on 6 AA batteries • 3.5" x 7.2" x 4.3", 13 oz. • **\$199.99**

10-1911 Velocity™ Speed Gun Easy-to-use, point and shoot pistol grip • Large, clear LCD display • Displays fastest speed once trigger is released • ±1 mph accuracy • Operates on (2) "C" batteries • 4.3" x 8.4" x 6", 13 oz. **\$99.99**

Look For This

NEW

& Check Out AES' Latest Additions.



SECURITY ITEMS

PE-319 Pedometer with Personal Security Stay at home. This pedometer features a 120dB panic alarm for personal security and emergency. Displays elapsed workout time, distance walked and a 12/24 hour clock on its backlit 2-line LCD display. **\$19.99**

ALL HAZARDS WEATHER RADIOS

WR-102 Portable S.A.M.E. Weather Radio A handheld all-hazards weather radio that receives and displays alerts, watches and warnings that apply only to a local area using S.A.M.E. technology

• Monitors 24-hour weather forecasts and alerts • Scans all NOAA channels • Monitors U.S. emergency alert system with auto activation • Dual LED power/alert indicator • Digital clock and alarm with snooze **\$49.99**



WR-196T Desktop S.A.M.E. Weather Radio AM/FM radio with ten memory presets • Digital tuning, including seven NOAA weather channels • Dual LCD display for clock and dot-matrix text message • Automatic audible and visual alert activation plus blinking LED warning • Standby mode to mute speaker • Digital clock, calendar, alarm, and 5-120 min. sleep timer • Operates from 3 AA's or AC adapter • 6.75" h x 5.25" w x 0.875" d, 0.75 lb. **\$69.99**

Emerson



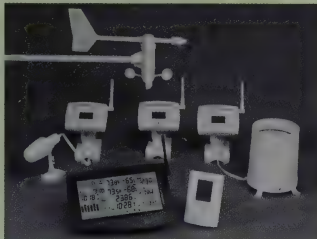
PDC-803 Electronic LCD Digital Compass Easy-to read LCD screen displays heading as a cardinal point (e.g. N, NW, SE) with numeric digits in degrees (e.g. 17°) plus a directional compass arrow • Backlight for night use • One touch calibration corrects for local magnetic interference • Mounts on dashboard with velcro • 3 AAA batteries included • 1.875" w x 3.625" h x 2.75" d, 4 oz. **\$29.99**



WEATHER STATIONS

RGR-122 Long Range Rain Gauge Self-empting and provides cumulative and daily precipitation totals for up to nine days. Its wireless,

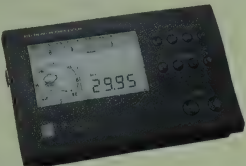
long range capability allows the collector to be placed up to 300 ft. from the main unit. The collection data is broadcast at 433MHz to the indoor base unit and displayed on an attractive easy-view 3.5" h x 1.5" d x 2.5" w LCD console. Includes indoor temp. gauge. Requires 2 "AA" batteries in both collector and main units **\$59.99**



WMR-968 Cable Free™ Weather Station Innovative wireless outdoor sensors with 300 ft. range operates on solar power for simple installation and sophisticated ease. Track and record over 20 separate weather conditions by a press of the touch-sensitive jumbo LCD display screen **\$399.99**

WM-918

Complete Weather Monitoring Station Monitors over 20 weather and environmental conditions. 40-foot sensor range. Self-dumping electronic rain gauge, outdoor temp. and humidity sensor, anemometer (wind speed/direction), and all wiring. Desktop control panel displays clock, calendar, alarm, and weather. Also features weather forecasting displaying local 12/24-hour forecasts. Uses 8 AAAs, AC adapter included. 7" l x 4.25" w x 1.5" h, 14.8 oz. **\$229.99**



WMR-112A CableFree™ Weather Station Uses innovative, wireless, outdoor sensors for simple installation. Operates on 433MHz at a 300' range from remote sensors.

- Measures outdoor temperature (-4°F to 140°F) and relative humidity (25%-95%)
- Measures indoor temperature (0°F to 122°F), relative humidity (25%-95%) and barometric pressure (17.27 to 31.02 in.Hg)
- Indoor touch-screen console, wall mount or desktop
- AC adapter
- Requires 12 "AAA" and 6 "AA" batteries (not included)
- 7.75" h x 3.5" w x 1.4" d **\$199.99**



OTHER WEATHER PRODUCTS

RM-116E Exactset™ Radio Controlled Clock (left) The most accurate of alarm clocks. Sets itself automatically by receiving time signals from the U.S. Atomic clock. Features blue HiGlo™ backlight LCD, snooze, day/month/seconds and automatic adjustment for Daylight Savings Time. **Closeout \$29.99**



EMR-812A

Cable Free™ Thermometer The latest in radio frequency technology! This Cable Free™ thermometer with jumbo display shows you the indoor temperature and the temperature from up to three remote locations. Includes one easy-to-install remote temperature sensor that can be placed up to 90 feet from the main unit - with no wires to install anywhere! • 433MHz operation • High/low memory and temperature alarms • Choose and change between Celsius and Fahrenheit • Includes one wireless sensor. **\$29.99**

THR-138 Extra Sensor **\$24.99**



We accept I.M.P.A.C.® Government Credit Cards



WEATHER STATIONS



WS-2010 Professional Wireless Weather Station Indoor temperature (32°F to 158°F), humidity, and barometric pressure (from remote) • Outdoor temperature and humidity (wireless, solar powered) • Min/maximum data for all readings with time and date recorded • Air pressure with 24-hour bar chart history • Forecast icon and pressure trend indicator • Wireless rain gauge (solar powered) tracks rainfall amount for last hour, last 24 hours, total • Wireless wind-gauge (solar powered) tracks speed and direction - up to 330° range • Includes wind-gauge, rainfall sensor, indoor temperature/humidity sensor, and outdoor temperature/humidity sensor • Receiver and sensors require alkalines (not included) • Free standing or wall mount • 8.5" w x 1.25" d x 6.5" h (receiver) **\$389.99**

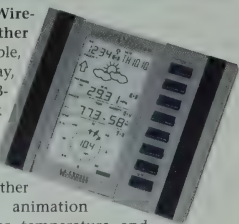


WS-2010-13 PC Interface for WS-2010 Wireless Weather Station Connects to serial port • Receives and stores all data • Included software calls in data and removes from interface, storing in a data file • Without computer

connected, can act as a data logger, storing several days collected data • Selected data can be exported as an ASCII file for use in other WIN 95/98 programs (Excel, etc.) • Generate graphs, charts, and data lists • Operates on 2 AA batteries (not included) **\$129.99**

WS-2310 Wireless/Wired Weather Center

Direct cable, or up to 80' away, wireless • WWVB-controlled clock shows day, date, minute, second, alarm, and time zone • Weather forecast with animation • Indoor/outdoor temperature and humidity, wind chill, dew point, rainfall (24 hrs, 1 hr, and total) • Wind speed (m/s, knots, bft, km/h, and mph) and direction with trend • Barometric pressure • Alarms: time, storm warning, weather (air pressure, temperature, humidity, rainfall, wind speed, and wind direction) • Stores up to 175 sets of weather data in memory for weather analysis and graphical display on PC (software CD-ROM and cables included) • Uses 3 AA batteries (not included) or included AC adapter **\$249.99**



WS-8025AL Sun/Moon Wireless Weather Station Indoor temperature (°F or °C) and humidity (RH%) • Remote temperature (°F or °C) and humidity (RH%) • Can receive as many as three remotes (one TX4U included) • Calculates sun/moon rise/set based on entered city (choose from 250 North American cities) • Barometric air pressure with 30-hour history chart • Forecast icon, based on changing air pressure • Forecast is about 75% accurate for 12-20 hours • Current moon phase • Wall-mount or fold-out stand • Radio-controlled time and date • Temperature alarm for remote temperatures • Storm warning indicator • 12 or 24-hour time mode • 7.5" w x 0.8" d x 10" h **\$159.99**



WS-9016U Sun/Moon

Wireless Weather Station WWVB-controlled time with manual settings • Calendar display, date, time zone • Alarm function with adjustable snooze • Sun/moon data for 45 U.S. locations • Weather tendency and air pressure trend • Indoor temperature and humidity display • Min./maximum outdoor temperature record with time • Receiver and remote require alkaline batteries (not included) • 4" w x 1.4" d x 6.75" h **\$79.99**



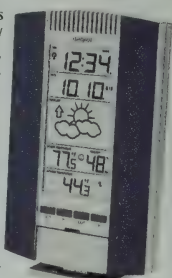
WS-7038UF Wireless Rain Gauge

Receives rain data from included, remote, self-emptying, rainfall gauge located up to 80' away • Shows rainfall for past hour, 24 hours or last rain period until manually reset • Rainfall history - view last 7 days, weeks, or months - scroll period by period on graph • Rain alarm function • Wall mount or free-standing with removable stand • 12/24-hour time mode, manual time set • Receiver/remote use 2 AA alkalines each (not included) • 3.5" w x .75" d x 4.2" h (receiver) **\$59.99**



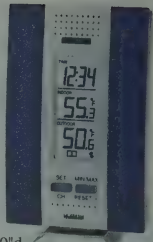
WS-7075UF Wireless Forecast Station

Indoor/remote temperature, indoor humidity • Forecast icon, based on changing air pressure, about 75% accurate for 12-20 hours • WWVB controlled 12/24-hour time, dual time alarms with snooze • Receiver and remote require alkaline batteries (not included) • Wall mount or free-standing with removable stand • 4.5" w x 1.0" d x 7.0" h • 80' range **\$59.99**



WS-7013U Wireless Temperature Station

Indoor/remote temperature with minimum and maximum memory (time recording for remote temperature) • 12 or 24-hour mode, manual set time • Wall mount or free-standing (removable) • Receiver and remote use 2 AA alkalines each (not included) • Up to 80 foot range • 2.75" w x 4.25" h x 1.0" d (receiver) **\$24.99**



OTHER WEATHER PRODUCTS

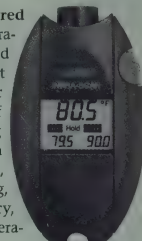
WT-5431 Projection Alarm with Remote Temperature

• 12 or 24-hour time, dual alarm with snooze • WWVB control, month/day, date • Time zones, GMT to 12 hours • Indoor and remote temperature • Projects from 3-10 feet onto wall or ceiling with adjustable rotation, intensity; auto focus • Backlit display when a button is pressed • Wall transformer (included) or 3 AA alkalines; remote requires 2 AAA's (not included) • 5.25" w x 3.5" h x 1.25" d **\$49.99**



IR-101 Infra-Scan Infrared Thermometer

Measure temperature in a fraction of a second without touching the object being measured. Useful for contact-free measurement of stationary and moving objects, finding cold spots in a home, checking food stuffs, heating and air conditioning, hot components (machinery, engines, etc.) • Single key operation • Back-lit LCD • Temperature range: -4°F to +572°F • Uses 4 LR-44 button cells (included) • 2.2" w x 0.9" d x 4" h **\$49.99**



WS-8017U-OAK Atomic Clock, Wireless Indoor/Outdoor Thermometer (oak finish)

Extra-large digital displays for readability. Extend the

foldout stand for use on table or shelf. Fold in for wall mounting (wireless remote sensor wall mount only). Displayed data in initial mode includes time (hour/minutes), month, date, weekday, in/outdoor temperature. Three other modes display seconds digitally in place of weekday, in or outdoor temperature. Sets automatically to WWVB radio signal (manual also possible) and synchronizes to U.S. atomic clock nightly. • 12/24-hour time • Alarm setting, snooze • Calendar with weekday abbreviations (english, french, or spanish) • 13 time zones • Day-light saving time option • 32° to 122°F (0° to 50°C) indoor temp. • -21.8° to 140°F (-29.9° to +59.9°C) outdoor temp. • 10-second indoor (5-minute outdoor) checking interval • 82' maximum transmit range • Requires 4 AAs (not included), lasting about 1 year • 11.4" w x 7.5" h x 0.98" d (clock) • 1.57" w x 5.04" h x 0.9" d (sensor) **\$39.99**

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DAVIS

WEATHER STATIONS

Professional quality for home, business, or scientific use. Add WeatherLink for detailed, long-term analysis using a PC. Standard weather stations assemble quickly with plug-in cable connections. Cables are connected to the console through a junction box with 8' cable. Console includes AC adapter with battery backup (not included).

All stations include, time in 12/24-hour format, date, U.S. and metric measure, highs and lows, calibration of some functions for increased accuracy under difficult conditions, sequential scan and display of readings, alarms for selected functions, console with LCD and reversible base (desk, shelf, or wall), and anemometer with 40' cable.

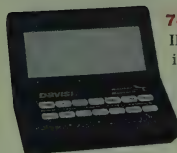


6150 Wireless Vantage Pro The latest in weather technology! Offers forecasting, on-screen graphing, and more. Monitors barometric pressure, temperature, humidity, rainfall, and wind speed and direction. Quick view icons show the forecast at a glance - sunny, partly sunny, cloudy, rain or snow, while a moving ticker-tape display gives more details. An innovative integrated and solar powered sensor suite combines rain collector, temperature and humidity sensors, and anemometer into one package - making setup easier than ever and improving performance and reliability. Typical wireless range is up to 150-200ft. For improved accuracy, the temperature and humidity sensors are housed inside a shield which protects solar radiation and other sources of radiated and reflected heat..... **\$539.99**

7425 Weather Wizard III Offers most monitoring features of the Weather Monitor II, except barometric pressure and inside humidity. Measure daily and accumulated rainfall with optional rain collector. Optional Weather-Link software will process and store data through an IBM-compatible or Mac.
• Metric or U.S. • 5.25" x 5.875" x 3"..... **\$179.99**

7852 Rain Collector II For 7440, 7425 and 7415. Read both daily and accumulated rainfall in 0.01" increments. Comes with 40' cable..... **\$69.99**

7400 Perception II State-of-the-art weather technology. Ideal for keeping track of climate conditions inside the home. No installation required. Looks similar to 7425. • Indoor temperature -32°F to 140°F • Barometric pressure with memory recall • Humidity • Alarms for temperature, humidity, time, and barometric change..... **\$139.99**



7440 Weather Monitor II Shows all weather monitoring functions and clock on an back lit, 1.875" x 4.375" LCD display. • Temperature readings of -50 to 140°F (outside), 32° to 140°F

(inside) • Wind calculations, including direction in 1° or 10° increments, speed to 175mph, and high wind speed and wind chill to -134°F • Barometer measuring barometric pressure with memory recall and trend arrow • Indoor high and low humidity from 10%-90% (outside optional) • Alarms for temperature, wind speed, wind chill, humidity, time and barometric trend • 5.25" x 5.875" x 3" **\$269.99**

7859 External Temperature/Humidity Sensor For 7440. Measure outside humidity, dew point and temperature. Includes 40' cable **\$119.99**



WIND METERS

4271 TurboMeter™ Wind Speed Indicator A turbine, suspended on sapphire jewel bearings, responds to the lightest winds • 3-digit LED display for viewing in sunlight or at night • Reads speed in miles/hour, knots, feet/minute, or meters/second.
• Requires 3 "AAA" batteries (not included). 5.625" h x 2.625" w x 1.125" d, 3 oz **C/O \$79.99**



4276 Windscribe Ultrasonic Wind Meter Reads current wind speed, headwind, tailwind, 5-second and running average. Select from mph, km/h, fpm, m/s, f/s or knots, plus temperature and wind chill in tenths of °F or °C. Sensitive to breezes as low as 0.4mph, and as high as 150mph. Three configurations (above) include handheld use with adjustable lanyard, tripod mount with 1/4" thread, and mounting bracket with Velcro® strap. Includes 3V lithium battery (up to 600 hours). 5" x 3" x 0.75", 3.5 oz. **\$99.99**

4281 Wind Wizard™ Wind Speed Indicator Accurately measures speed from 0-60mph in miles/hour, meters/sec., and Beaufort. Readout supported by sapphire jewel bearings and steadied by rare-earth, magnetic, damping system. Latching folding handle. No batteries needed. 3.625" x 2.875" x 1" folded, 2.5 oz..... **\$47.99**

SOFTWARE

7862 WEATHERLINK® Links a PC and PerceptionII, Weather WizardIII, or Weather Monitor II. Create graphs, calculate average conditions, generate summaries, analyze trends, etc **\$149.99**

7866 Same as above, for Mac.. **Closeout \$99.99**

MIDLAND



WR-300 Specific Area Message Encoding Weather Radio • 20 programmable counties • AM/FM and 7-channel weather radio • Time and alarm clock with full date display • 10 memory channels • Ability to add up to 8 alerts (i.e. AMBER) • Ability to remove alerts (i.e. flood - if you live on a hill) • Choose between single, multiple, or all-county codes • Uses analog and digital signaling.. **\$49.99**



74-200 Digital Weather/Hazard Alert Monitor Provides 24-hour National Weather Service information from 7 NOAA channels for maximum capability up to 50 miles. Eight-character LCD displays up to 56 types of S.A.M.E. watches or warnings and monitors status of user selectable warning system. Weather Command button switches from alert mode to full monitoring. Clock displays time and date and has alarm functions. Telescoping antenna, external antenna input and alert device output jacks. Operates from 9-14VDC and 117VAC with supplied adapter. Accepts 9V battery for backup during outages. 7.75" w x 2" h x 5" d, 18 oz. **\$49.99**

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POWER SUPPLIES

• 105-125V AC input, 13.8V DC output; internally adjustable from 11-15V • Electronic regulation with fold-back current limiting and crowbar over-voltage protection • Heavy-duty heat sink • 3-wire cord • 1-year warranty • Made in U.S.A.

Separate volt and amp meters on RS-20M, 35M, 50M and 70M. Separate volt and amp meters, plus voltage adjustment (2-15V DC) on VS-20M, VS-35M and VS-50M. RM-35M, RM-50M and RM-60M are rack mount models, plus separate meters.

Model	Cont. Amps	ICS Amps	Size (in.) H x W x D	Shipping weight	Price
RS-7A	5	7	3.75 x 6.5 x 9	9	\$59.99
RS-10A	7.5	10	4 x 7.5 x 10.75	11	69.99
RS-12A	9	12	4.5 x 8 x 10.75	13	79.99
RS-20A	16	20	5 x 9 x 10.5	18	99.99
RS-35A	25	35	5 x 11 x 11	27	149.99
RS-35A/220V	Same as RS-35A but 220V input				169.99
RS-50A					219.99
RS-70A					259.99

With separate Volt & Amp meters

RS-20M	16	20	5 x 9 x 10.5	18	119.99
RS-35M	25	35	5 x 11 x 11	27	169.99
RS-50M	37	50	6 x 13.75 x 11	46	239.99
RS-70M	57	70	6 x 13.75 x 12	48	289.99

Adjustable output; separate Volt & Amp meters

VS-20M	16	20	5 x 9 x 10.5	20	139.99
VS-35M	25	35	5 x 11 x 11	29	189.99
VS-50M	37	50	6 x 13.75 x 11	46	259.99

Rack mount models; separate Volt & Amp meters

RM-35M	25	35	5.25 x 19 x 12	38	249.99
RM-50M	37	50	5.25 x 19 x 12	50	279.99
RM-60M	57	55	7 x 19 x 12	60	359.99

POWER SUPPLIES WITH ADDED FEATURES

RS-4L Has a built-in cigarette lighter receptacle in the front panel. 13VDC @ 4A peak, 3 Amps continuous. 3.5" h x 6.5" w x 4.25" d, 6 lbs **\$49.99**

RS-12S With built-in speaker. Rated 13VDC @ 12A peak, 9A contin. 4.5" h x 8" w x 9" d, 13 lbs **\$89.99**

SWITCHING POWER SUPPLIES



SS-25 12V DC, rated 20A continuous, 25A ICS. 3" h x 7" w x 9.5" d, 4.2 lbs **\$109.99**

SS-25M Same as above with volt and amp meters **\$129.99**

SS-30 12V DC, rated 25 amps continuous, 30 amps ICS, 3.75" h x 7" w x 9.5" d, 4.5 lbs **\$119.99**

SS-30M Same with volt/amp meters **\$139.99**

POWER INVERTERS

12/115 General Purpose Converts 12V DC to 115VAC @ 60Hz. Provides convenient, mobile, AC house current (boat, car, truck, etc.). Powers a ham rig, small household appliance, TV, tools and lights up to 200W continuous (peaks up to 240W, overload protected). Produces square wave output, not recommended for devices where high transients are not tolerable. 4.5" h x 8" w x 9" d, 9 lbs C/O **\$34.99**

N2412-12 28V Aircraft Converts 22-32V DC input to 13.8V DC output @ 10 amps. Eliminates tapping into a 28V battery for 12V power **\$49.99**

N2412-24 Same as above, rated at 20A .. **\$79.99**



SMALL POWER SUPPLIES

38-384 Light-duty DC Supply (pictured) Input: 115 V AC • Output: 13.8V DC regulated @ 4A • Front panel binding posts • LED indicator, fuse protection • 7.75" d x 4.75" w x 3" h, 5.5 lbs **\$39.99**

38-305 AC Adapter Provides multiple low-voltage DC to operate various battery powered equipment requiring 3, 4.5, 6, 7.5, 9 or 12V DC with a max. current rating of 500ma. Multiple application plugs and 9V snaps fit most devices **\$9.99**

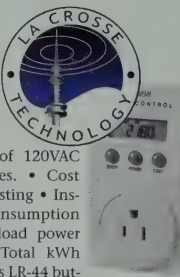
38-312 Regulated AC Adapter Multi-voltage with multiple plugs and 9V snaps. Selectable 1.5, 3, 4.5, 6, 7.5, 9 or 12V DC regulated with a maximum current rating of 1200ma. to operate a wide range of battery operated devices **\$29.99**



GZV-4000 Switching Mode DC Power Supply with Built-in Speaker 120V AC input • Variable output: 5-15V DC with center detent at 13.5V DC • 40 amps continuous rating, 100% duty cycle • Over temperature, overload, short-circuit protection with current foldback at approximately 42 amps • Overload indicator • Selectable monitoring of voltage and current • DC terminals on rear • Cigarette lighter jack on front • Filtered AC line • 8.25" x 13" x 4.5", 8 lbs **\$179.99**

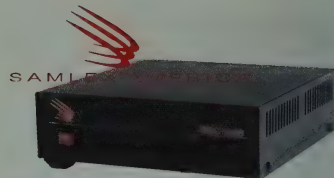
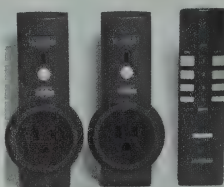
3362U Power Cost

Controller Provides monitoring of electricity consumption. Approximately 3W to 1800 W range, ideal for use with a large variety of 120VAC 60Hz (15A) appliances. • Cost monitoring and forecasting • Instantaneous power consumption (Watts) • Maximum load power (maximum Watts) • Total kWh consumption • Includes LR-44 button cell **\$29.99**



RS-204U

Remote Control Outlet System Control multiple outlets by remote control. Units plug into existing outlet to turn on/off lamps, tools, appliances, etc. - up to 20A. Operates up to 80', even through walls. Includes remote and 2 outlets. Uses 2 AAA batteries (not included) **\$29.99**



SWITCHING POWER SUPPLIES

SEC-1223 Low Cost, Base Station Power Supply for HF, UHF & VHF Transceivers Switching mode design • 23 Amp rating • Current limiting • Short circuit protection • Overvoltage protection • Anodized black chassis and powder coat wrinkle black steel cover • Input: 110-120VAC, 200-240VAC • 4.9A input current • 13.8VDC output voltage • 23 Amps output current (24 Amps maximum) • 3-year warranty • 7.2" x 8.7" x 2.2", 3.3 lbs **\$99.99**



SPS-1204UL 3.5A Switching Supply Small and lightweight, provides highly regulated DC power. Cigar lighter output socket on front panel and wire terminals on rear. Over-voltage protection, current limiting, illuminated On/Off switch. UL and cUL approved • 110-125 VAC input • 13.2 VDC output • 3.5 Amps • 2" h x 4" w x 6.3" d, 2 lbs **\$29.99**



DC - AC INVERTERS

SI-175HP 175 Watt 12VDC-110VAC Inverter Useful anywhere when 110VAC isn't available - boats, RVs, emergency, etc. Uses high efficiency switching mode design with modified sine wave output voltage and low idle power draw (<0.05A). Overload protection, low battery alarm and shut down. Cigar lighter • 10-15VDC input • 115 Volts RMS output • 175W (continuous), 350W (surge) • 1.6" h x 4.7" w x 5.4" d, 1.8 lbs **\$29.99**



SI-400HP 400W 12VDC-115 VAC Inverter Similar to the SI-175HP, but higher (400W) rating. Cigar lighter input connector and battery clamp included • Input Voltage: 10-15 VDC input • 115 Volts RMS output • 400W (continuous), 800W (surge) • 2.4" h x 6.3" w x 6.3" d, 2.9 lbs **\$49.99**

FCP-1000 12V-1000mA Adapter/Charger For operating or charging cell phones. Wall mount with cigar lighter receptacle • 110-120VAC input • 12VDC output • 1000mA, 19W output current • 2.25" h x 2.75" w x 4.25" d, 1 lb **\$9.99**



SURGE SUPPRESSORS

SUPER-7 For spike suppression and noise filtering, 18,000 amp surge suppression, and RFI/EMI filtering. Seven outlets, 7-foot cord, three diagnostic LED indicators **\$19.99**

SUPER-7+TEL Same as above with 6 outlets and fax/modem protection for modular jacks.. **\$29.99**

ISOBAR-8 ULTRA Premium Surge Protector Rugged all metal housing - won't break or burn • Isolated filter banks to eliminate interference between connected equipment • Massive 1,200 joule, 96,000 amp spike suppression • Diagnostic alarm system indicates wiring faults, protection circuitry and power line status • 8 outlets, extra long 12' cord..... **\$79.99**

MFJ MFJ ENTERPRISES, INC.

CHARGERS

631 PowerHaus™ Trickle battery charger Perfect for charging NiMH or NiCad rechargeable batteries used in the 259B/269 SWR Analyzer or other equipment. It has a removable dust cover and an AC 12 Volt, 800mA wall adapter is included. Reverse polarity protection and a bright red LED indicator that shows charging status. Does NOT charge alkaline batteries. Charges 2 to 4 NiMH or NiCad "AA" batteries in 14 hours. **Closeout \$9.99**

633 Intelligent Charger Charges 2 or 4 NiCad and NiMH AAA, AA, C, D (charging 2 at a time) and 1 or 2 9V cells • Ultra-fast, safe Constant Pulse Current charging • IC detects both +DV and -DV, and monitors the voltage level during the charging process • Discharge Mode deep conditions to correct memory, and can rescue dead batteries • Final trickle charge • Charging status LEDs • 120 VAC or 12 VDC operation. **\$24.99**

BATTERIES

92AA01 Super Ni-MH "AA" batteries - they have twice the power of standard NiCads. Rated at 1300 mAh, these NiMH 1.2 volt batteries greatly extend operating time and do not exhibit the capacity reducing memory effect of NiCads. Perfect for use with the 259B/269 SWR analyzer with its built-in battery charging circuit. The 631 or 632 charger is recommended **\$2.99**

92AA10 Super NiMH 10-pack..... **\$24.99**



strap. 3.5" w x 1" d x 6.5" h, 30 oz..... **\$66.99**

UNI-SOLAR



SmartCharge flexible solar panels for advanced solar battery charging. Sized to charge and maintain 12V batteries. Flexible and durable design makes them very convenient to use.

USF-5 5W Solar Panel Ideally, provides up to 2A-hours a day and automatically compensates for battery self-discharge. For hams, boaters, RV owners and other battery users. Perfect for vehicles that stay idle for extended periods. • Lightweight • 10" x 20" • For lower use applications • 0.54 lbs..... **\$89.99**

USF-32 32W Solar Panel Heavy duty, provides more than 12A-hours (ideally) a day. Meets demands for portable ham operations, lighting, radios, stereos, fish finders, etc. Use multiple units for more capacity. • 17" X 60" • 2.14 lbs. **\$269.99**



P-212 2-Outlet Cigarette Plug Adapter (left) Use two 12V accessories from 1 outlet..... **\$4.99**

P-212B Dual Cigarette Socket (top right) Enables two 12 volt accessories to be used from one outlet, comes with replaceable 15 amp fuse **\$8.99**

P-12R 2-Contact Cigarette Plug (bottom right) Solder type with strain relief and grip end... **\$1.99**

P-12V Cigarette Plug Cigarette lighter plug with leads..... **\$1.99**

P-12X Cigarette Lighter Plug Easy to use solderless plug. Crimp wire to terminals..... **\$1.69**

Power Pocket Portable power for emergencies, ham-fests, hiking, etc. The 12V @ 2A/hour sealed lead-acid rechargeable battery provides up to 6X longer talk time than standard packs. Recharges completely in 6-8 hours, with supplied charger. Partial discharges can be recharged to 100% without memory effect. Radio conveniently plugs into included female adapter socket. Compact carrying case with belt loop and shoulder strap. 3.5" w x 1" d x 6.5" h, 30 oz..... **\$66.99**

CHARGERS

MH-C401FS4AA2 Cool Charger Microprocessor controlled. Charges AA/AAA NiMH/NiCads, while keeping them cool. Includes 4 PowerEx 2200 rechargeable NiMHs & car cord. Over-charge prevention. 100-minute or 5-hour charging **\$49.95**

MH-C204F Smart Rapid Charger/Conditioner Charges 2 or 4 AA/AAA NiCad/NiMH rechargeables in 2-3 hours. Rejuvenate and restore dead batteries. 110V operation or can be used on 12V supply and in a car with the optional kit..... **\$24.99**

MH-C204F8AA22 Above, with 8 PowerEx 2200 mAh AA rechargeable NiMHs, car cord **\$49.95**

MH-C888 Universal Drop-In Rapid Charger/Conditioner Special FLEX negative pulse feature prevents crystallization of 4.8 to 12V NiMH/NiCad battery packs. Deep-conditioning allows 3 consecutive charge and discharges. Built-in switching AC power supply, for home, office and 12V portable use... **\$59.99**

MH-C777 Universal Charger/Conditioner Charge nearly any type of 4.8V to 12V NiCad or NiMH battery pack. Conditioning

feature "exercises" batteries to improve capacity, and in some cases can rejuvenate a dead pack. 110 and 12V operation. Car kit is included..... **\$49.99**

MH-C777 PLUS II Smart Universal Charger and Analyzer/Conditioner Charges most NiMH, NiCad, Li-Ion and Li-polymer battery packs. Built-in circuitry with LCD status automatically senses battery voltage. Includes external 110V switching power supply and 12V cord with cigarette lighter • Discharge-only feature retains discharged capacity on screen • Enhanced Li-ion algorithm reduces charging time **\$89.99**

RECHARGEABLE NiMH BATTERIES

4-AA-220-BH PowerEX AA NiMH Now rated 1.2V @ 2200mAh • Recharge 500 to 1000 times • Memory free • For power intensive devices (digital cameras, MP-3 players, GPS) (pack of 4) **\$18.99**

9V 8.4V, 170mAh (9V sized) ea. **8.99**

MH-FNB-72 Ultra high capacity 1700mAh, 9.6V NiMH exclusively for the Yaesu FT-817. Includes recharging cable for use with MH-C777, MH-C777PLUS, or MH-C888 (shown above)..... **\$59.99**

MFJ Switching Power Supplies

Power your HF transceiver, 6 meter/2 meter/440 MHz Mobile/Base and accessories with these
25 or 45 Amp MFJ MightyLite™ Switching Power Supplies!
No RF hash . . . Super lightweight . . . Super small . . . Volt/Amp Meters . . .



4125

Small & Lightweight – MightyLites™ are so light and small you can carry them in the palm of your hand! Take them with you anywhere – no more hauling around heavy, bulky supplies.

Lightweight – The 25A **MightyLite™** only weighs 3.7 pounds – 5 times lighter than an equivalent conventional power supply. And, the 45A model weighs just 5.5 pounds!

No RF hash – Some switching power supplies generate objectionable RF hash in your transmitted and received signal. But, these babies are clean!

Low Ripple and Highly Regulated – Less than 35 mV peak-to-peak ripple and better than 1.5% regulation under full load.

Fully Protected – You won't burn up these power supplies! They are fully protected with overvoltage and overcurrent protection circuits.



4225MV

Worldwide Versatility – Switchable AC input voltage for 85-135 or 170-260VAC.

Mighty Features – Model 4225MV and 4245MV feature a front-panel voltage control which varies output voltage from 9 to 15VDC. Front-panel mounted 5-way Heavy Duty binding posts and cigarette lighter socket for mobile accessories. The 4245MV has two sets of quick-connects on the rear for accessories. Dual three inch illuminated meters monitor load voltage and current. Internal fan.

4103 Miniature Switching Power Supply – Delivers up to 40W (13.8 VDC @ 2.89A), RFI and Hash FREE. Only 4-1/8 x 2-5/8 x 1-3/8 in., weighs 10 oz. Ideal for the FT-817 and other QRP rigs. Input: 100-240 VAC @ 47–63 Hz. Over voltage, over current, and over temperature protected. Includes a DC output cable with a 2.1mm x 5.5mm plug that fits most MFJ, other ham accessories and QRP rigs. Adapter cable for the Yaesu FT-817 is included **\$39.99**



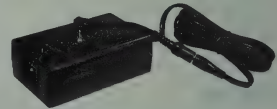
4245MV

Three models to choose from . . .

4125 (left) Basic, no metering, 25A maximum or 22A continuous. Size: 5-1/2 x 2-1/2 x 2-1/2 inches, 3.5 pounds..... **\$99.99**

4225MV (center) 25A max. or 22A continuous. Size: 5-3/4 x 4-1/2 x 6 in., 3.7 lbs **\$139.99**

4245MV (right) 45A max. or 40A continuous. Size: 7-1/2 x 4-3/4 x 9 in., 5.5 lbs **\$189.99**



MFJ 35/30 Amp Adjustable Regulated DC Power Supply

Massive 19.2 pound transformer . . . No RF hash . . . Adjustable 1 to 14 VDC . . .

Super Heavy Duty – This conventional power supply is excellent for powering all types of amateur transceivers and accessories. A massive 19.2 pound transformer allows this power supply to easily deliver 35A maximum and 30A continuous. It's highly regulated with load regulation better than 1% and ripple voltage less than 30 mV.

Fully protected – Over voltage, fold back and short circuit protection. A whisper quiet fan keeps components cool by increasing speed as load increases.

Adjustable Voltage – Front panel control allows adjustment from 1 to 14 VDC with a convenient detent set at 13.8V. Dual front-panel meters monitor voltage and current.

Versatile – There are three sets of output terminals including a pair of Heavy Duty, 5-way binding posts for transceivers, two pairs of quick-connects for accessories and a cigarette lighter socket for mobile accessories.

Size – 9-1/2 x 6 x 9-3/4 inches, 20.6 lbs.

MFJ's No Matter What™
One Year limited Warranty

MFJ will repair or replace (at MFJ's option) these products for 1 year.



4035MV **\$139.99**

MFJ High Current Multiple DC Power Outlets

Distribute power to transceivers and 6 or more accessories from your 12 VDC power supply



1118 Deluxe Multiple DC Power Outlet – The most versatile and highest current rating. Connect to a 12VDC source and distribute power to 2 transceivers and 6 or more accessories. Features 2 pairs of Super Heavy Duty 30A, 5-way binding posts, fused RF bypassed and rated 35A total draw. And, 6 pairs of 5-way binding posts for accessories rated for 15A total draw. Master fuse, On-Off switch with power LED. Built-in 0-25 VDC voltmeter, 6 ft. of 8-gauge, color-coded cable with ring tongue terminals. Binding posts are spaced for standard dual banana plugs. Size: 12.5" x 2.75" x 2.5" **\$74.99**



1116 Similar to the 1118 but does not have 30A posts. Has "Power On" LED and 0-25 VDC voltmeter. Rated at 15A total draw **\$49.99**

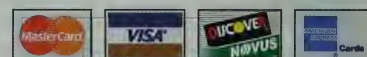


1117 Similar to the 1118 but no meter, power LED or On-Off switch. Powers up to 4 radios at the same time. Two 35A single posts and one 35A dual post. Size: 8 x 2 x 3 in., fits almost anywhere **\$54.99**



1112 Similar to the 1116 but no On-Off switch, power LED, voltmeter or fuse **\$34.99**

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MIRAGE Power Amplifiers

Boost Mobile, Base or Handheld Power!
All Modes: FM, SSB, CW ... Superb GaAs FET preamplifier in G Models
Overdrive, high SWR, Over-temperature protection ... Remote controllable

**2 Meters
All Mode
160W • 200W
300W**



B-5018G 160W output with 50W input. Requires 17 to 24 amps @ 13.8VDC. Low Noise GaAsFET Preamplifier. 5-1/2" w x 3" h x 12" d. **\$299.99**

Power Curve - typical for the B-5018-G										
IN	0.5	5	8	10	15	20	25	35	50	
OUT	---	52	99	119	125	130	135	145	160	

B-2518G 160W output with 25W input. Low noise GaAs FET preamplifier. Requires 17 to 24 Amps @ 13.8VDC. 5-1/2" w x 3" h x 12" d. **\$299.99**

Power Curve - typical for the B-2518-G										
IN	0.5	5	8	10	15	20	25	---	---	---
OUT	5	56	91	111	135	153	160	---	---	---

B-1018G 160W output with 10W input. Low noise GaAsFET preamplifier. Requires 17 to 24 Amps @ 13.8VDC. 5-1/2" w x 3" h x 12" d. **\$369.99**

Power Curve - typical for the B-1018G										
IN	0.5	5	8	10	---	---	---	---	---	---
OUT	30	150	155	160	---	---	---	---	---	---

B-2530G 300W output with 25W input. Low noise GaAsFET preamplifier. Requires 48 amps @ 13.8VDC. Size: 12" w x 5" h x 12" d. **\$689.99**

Power Curve - typical for the B-2530G										
IN	1	3	5	10	25	---	---	---	---	---
OUT	30	95	140	250	300	---	---	---	---	---

B-5030G 300W output with 50W input. Low noise GaAsFET preamplifier. Requires 48 amps @ 13.8VDC. Size: 12" w x 5" h x 12" d. **\$669.99**

Power Curve - typical for the B-5030G										
IN	1	3	5	10	25	50	---	---	---	---
OUT	---	---	55	150	220	300	---	---	---	---

B-320G Up to 200W output. Low power input for Handheld Radios 250mW to 10W. High power input for mobile radios, 10W to 50W. Low noise GaAs FET preamplifier. **\$429.99**

35W/100W for your HT



B-34G (left/bottom) Boosts 2M HTs with up to 8W output to 35W+ output. SSB/FM. GaAsFET preamp and mobile bracket. 13.8 VDC @ 4A. **\$99.99**

B-34 (left/top) Like B-34G but FM only, no preamp or mobile bracket. 3-1/8" x 1-3/4" x 4-1/4". **\$79.99**

B-310G (right) Boosts 0.25 to 8W 2M Handhelds to 25 to 100W+ output. Includes preamp, mobile mounting bracket & BNC to amp patch cable. 13.8 VDC @ 15A. 4-3/4" w x 1-3/4" h x 7-1/4" d. **\$179.99**

Power Curve - typical for the B-310G										
IN	.25	0.5	1	2	4	6	7	8	---	---
OUT	25	50	75	95	100	100	100+	100+	---	---

**6 Meters
All Mode
150W**



A-1015G Covers 50 to 52MHz and provides 150W output with 10W input; FM/SSB/CW. Built-in Low Noise GaAsFET receive preamplifier, internal T/R switching and remote keying. 13.8 VDC @ 18-23 Amps. 5-1/2" w x 3" h x 12" d., 5 lbs. **\$349.99**

**2M/440
Dual Band
35/45W**



BD-35 For DUAL-BAND HTs with up to 7W output. Produces up to 45W output on 2M and 35W on 440 MHz. Automatic band selection, full duplex operation. Single connector for dual band radios and antennas. 12-15 VDC @ 7A. Size: 5" w x 1-3/4" h x 5" d. Mobile bracket included. **\$149.99**

Power Curves - typical BD-35 output power										
Watts Out (2M)	30	40	45	45+	45+	45+	45+	45+	45+	
Watts Out (440 MHz)	16	26	32	35+	35+	35+	35+	35+	35+	
Watts In	1	2	3	4	5	6	7	8		

REMOTE CONTROL HEADS

RC-1 - Allows remote control of Mirage amplifier functions: Power and pre-amp On-Off, FM/SSB mode select. Only 1.75" x 3.75" x 2.5". Comes with 18 ft. head to amplifier control cable. **\$45.99**
RC-2 for B-XX18G series amplifiers. **\$45.99**



More MIRAGE amps...

including models for 220MHz, 430-440MHz. Also, continuous duty Repeater Amplifiers for 6, 2, 1-1/4 meters, 70 cm, 450 MHz & ATV.

See the Price Guide under MIRAGE

Low Noise GaAsFET Receive Preamps

- Improves weak signal reception • <0.8dB noise figure • 15-22dB gain with selectable level prevents receiver overload and intermodulation • Automatic TR switching up to 100W thru put • Rugged die-cast enclosures • In-Shack or Mast-Mount models



In-Shack Models - **\$129.99** ea.

KP-1/6M 50-54MHz **KP-1/2M** 144-148MHz

KP-1/440 430-450MHz

KP-1/10M for 28-30MHz - Closeout **\$99.99**

KP-1/220 220-225MHz - Closeout **\$99.99**

Mast Mount Models - **\$179.99** ea.

KP-2/6M for 50-54MHz **KP-2/2M** 144-148MHz

KP-2/440 430-450MHz

KP-2/10M 28-30MHz - Closeout **\$119.99**

KP-2/220 220-225MHz - Closeout **\$129.99**

MFJ

DC Power for your MIRAGE Amplifier



4035MV Heavy Duty - the transformer alone weighs 19.2 lbs! Voltage front panel adjustable 0-15 Volts. Dual meters show Volts and Amps. Rated 30A continuous, and 35A peak. Fully regulated and fully overload protected. 110 VAC. **\$139.99**

VECTRONICS

... fine amateur radio products



Versatile 300W Antenna Tuner

VC-300DLP Match any antenna • Full 1.8-30 MHz coverage • Rated 300W PEP, 200W continuous; 150W on 1.8 MHz • Continuous rotation capacitors and 12-position switched inductor • Peak reading backlit Cross-Needle Meter • Built-in 8-position antenna switch and dummy load 10-1/4" w x 9-1/2" d x 3-1/2" h, 3.4 lbs. **\$149.99**

More Vectronics Amateur Products

AT-100 Tuned active SWL antenna **\$79.99**
DL-300M 300W dry dummy load **\$44.99**
DL-650M 1500W dry dummy load **\$74.99**
DL-2500 2500W dry dummy load **\$179.99**
VC-300M 300W mobile tuner **\$99.99**
VC-300D 300W tuner w/digital bargraph. **\$179.99**
HPF-1 75/300Ω high pass TVI filter **\$24.99**



High Power Roller Inductor Tuner

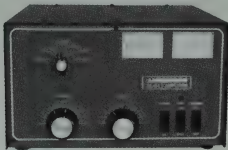
HFT-1500 Match any antenna Full 1.8-30MHz coverage • Rated 2KW PEP, 1KW continuous • Three continuously variable components: two 4.5kV capacitors and a crank driven a roller inductor with digital counter • Lighted Cross-Needle SWR/Wattmeter and 20-segment Digital Bargraph • Built-in 6-position coax switch and 4:1 balun • 5-1/2" h x 12-1/2" w x 12" d, 10 lbs. **\$399.99**

HPF-2 Dlx. 75/300Ω high pass TVI filter ... **\$29.99**
PM-30HF 1.8-60 MHz SWR/wattmeter. **\$79.99**
PM-30UV 144/220/440MHz SWR/wattmeter. **\$89.99**
LP-30 1500W low pass filter **\$69.99**
LP-2500 2500W low pass filter **\$129.99**

See the Price Guide for a list of Vectronics Kits

811A Amplifiers

- Cover 160-15M, including WARC/MARS bands
User Modifiable for 10/12M with proper license
- All Modes
- HD silicon steel core Plate Transformer (17 lbs.)
- Tuned Input • ALC Control • Quiet Air Cooling
- Dual Meters show Plate Voltage, Grid and Plate Current • Vernier Reduction tuning
- Comes wired for 120V Operation
- Size: 15.5" d x 13-3/4" w x 8.25" h, 52 lbs.



AL-811 - Uses (3) 811A transmitting tubes. Delivers 600W PEP output SSB and 500W CW..... **\$599.99**

AL-811H - Uses (4) 811A transmitting tubes. Delivers 800W PEP SSB or 600W CW **\$749.99**

3-500Z Amplifier

- Covers 160-15M, including WARC bands.
User modifiable for 10/12M with proper license
- HD silicone steel core Plate Transformer (26 lb) and Computer Grade capacitors
- A Full KW PEP! (70% efficiency)
- Tuned Input • Adjustable ALC • Air Cooled
- Dual Cross-needle meters show SWR, Refl. PEP power, Plate voltage, Grid and Plate current
- Operates from 90-140 VAC or 205-250 VAC
- Size: 15-1/2" d x 14-1/2" w x 18-1/2" h, 48 lbs.



AL-80B - Uses a single 3-500Z transmitting tube. Delivers 1000W PEP output SSB and 850W CW. The high-voltage secondary can be wired to reduce plate voltage for efficient operation below 400W for use outside the USA **\$1249.99**

Solid State Mobile Amplifier



ALS-500M - Uses (4) 2SC2879 RF power transistors. The ideal amplifier to increase your HF mobile up to 500 Watts. Continuous coverage 1.5-22 MHz* with instant bandswitching, no tuning, no warm-up and SWR protected. Runs nicely from 13.8 VDC mobile electrical system, draws 75A peak current. Size: 3-1/2 x 9 x 15 inches, 5-1/2 lbs. **\$699.99**

Solid State Base Amplifier



ALS-600 - No tuning, no fuss, no worries - just turn it on and operate. Continuous coverage 1.5-22MHz*, instant bandswitching, SWR and over power protected. Full 600W output, includes AC power supply. Extremely quiet, very compact. Amplifier and power supply both 6" x 9-1/2 x 12 inches, 30 lbs., total. **\$1129.99**

*Modification kit (MOD-10M) for 10/12M operation is available direct from Ameritron

www.mfjenterprises.com

AMERITRON

3CX-800A7 Amplifiers

- Cover 160-15M, including WARC bands.
User Modifiable for 10/12M with proper license
- HD silicon steel core Plate Transformer (32 lb.)
- Tuned Input • ALC Control • Air Cooled
- Dual illuminated Cross-Needle meters show SWR, Plate voltage, Grid and Plate current
- Operates on 90-140 VAC, 200-250 VAC
- Size: 8-1/2" h x 16-1/2" w x 13-3/4" d, 52 lbs.



AL-800 - Uses as a single *Eimac*® 3CX800A7 tube. Delivers 1250W PEP SSB output..... **\$1699.99**

AL-800H Uses (2) *Eimac*® 3CX800A7 tubes. Delivers 1500W PEP SSB output..... **\$2499.99**

572B Amplifier

- Covers 160-15M, including WARC bands
User modifiable for 10/12M with proper license
- Heavy Duty silicone steel core Plate Transformer
- Instant 3 second warm up
- Tuned Input • ALC Control • Air Cooled
- Dual illuminated Cross-needle meters show SWR, Plate voltage, Grid and Plate current
- Multi-voltage Operation
- Size: 8-1/2" h x 15-1/2" w x 14-1/2" d, 40 lbs



AL-572 This Near Legal Limit™ amplifier uses (4) rugged 572B tubes. Delivers 1300W PEP SSB and 1000W CW continuous output for about 65% of the price a full legal limit amplifier..... **\$1349.99**

Super Legal Limit Amplifiers

- Cover 160-15M, including WARC bands.
User modifiable for 10/12M with license
- Strong Stainless Steel Chassis
- Highly efficient *PeterDahl* tape wound *Hypersil*® Plate Transformer, capable of 2500W
- Grid and Plate meters show drive, ALC, Power output and PEP Watts
- Size: 18" h x 17" w x 10" d, approx. 77 lbs.



AL-1500 - Uses a single *Eimac*® 8877 Ceramic tube. Only 65W of drive power delivers full legal 1500W CW output. Time-delayed start protects the tube and over-current shut-off removes the drive if amplifier is mistuned..... **\$2649.99**



AL-1200 - Uses Ham radio's toughest tube, the *Eimac*® 3CX1200A7. It has a 50W control grid dissipation and can deliver more than 2500W two-tone output for a half hour **\$2299.99**



AL-82 - Uses a pair of 3-500Z tubes. Delivers 1500W output which is more than other 3-500Z linears because their lighter weight power supplies can't use these tubes to their full potential **\$2199.99**



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AMERITRON



ATP-100

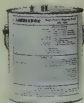
ACCESSORIES

ATP-100
Tuning Pulser - Safely tune up RF power amplifiers. Prevents overheating, tube damage, power supply stress and component failure..... **\$49.99**

ADL-2500
Dry Dummy load - Rated 2500W average power for 1 minute on, 10 minutes off, 300W continuous. Air cooled, low VSWR up to 60MHz..... **\$189.99**

ADL-1500
Oil Filled Dummy Load - Handles 1500W for 5 minutes. Usable with low VSWR up to 400 MHz. Includes oil and container as pictured..... **\$69.99**

QSK-5
Pin diode T/R Switch - Faster than a vacuum relay. Connects externally to HF RF power amplifiers. Handles 2.5 kW PEP, 2 kW CW **\$329.99**



ADL-2500



ADL-1500



ICP-120/240



QSK-5



ATR-30



ICP-120/240



ATR-30



ARB-704



RCS-4



AWM-30



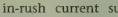
AWM-30



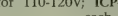
ICP-120/240



QSK-5



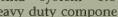
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ICP-120/240



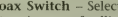
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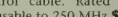
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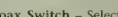
RCS-4



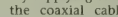
AWM-30



AWM-30



AWM-30



AWM-30



ICP-120/240



QSK-5



ATR-30



ICP-120/240



ATR-30



ARB-704



RCS-4



AWM-30



AWM-30



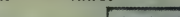
AWM-30



AWM-30



ICP-120/240



QSK-5



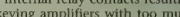
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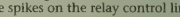
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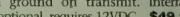
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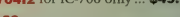
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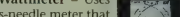
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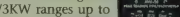
AWM-30



AWM-30



AWM-30



AWM-30

ICOM



PW-1 HF + 50MHz Solid State Linear Amplifier
Frequency range: 160-15m, 6m • Power output with 220V input: 1000 PEP SSB, 1000W CW/RTTY (100% duty cycle, QSK) • 100W drive • Built-in all band automatic antenna tuner • Automatic AC voltage selector and band change • Current, voltage, temperature, SWR, output power protectors • Wide range adjustable ALC allows use with almost any rig • Control head may be detached from main unit (shown) • Built-in 110/220VAC supply • 14" w x 10.5" h x 14.5" d, 56 lbs. **\$4549.99**

YAESU



QUADRA SYSTEM HF/50MHz Solid-State Amp
Frequency range: 160-15m, 6m • 1000W (6m: 500W) • 100W drive • 4 twin MOSFET PA modules • Dot matrix multi-function LCD • 2 input and 4 output jacks for easy connection to station antenna • Built-in high-speed auto antenna tuner • Panoramic SWR display shows "before tuning" and "after tuning" SWR data • SWR protection • Auto band switching with FT-1000, FT-1000MP, FT-1000MP MK V, MK V FIELD, and FT-920 • 117VAC for 500W; 220V AC for 1000W • 6.25" x 5.375" x 16.25", 59 lbs. **\$3999.99**

SGC

52-96 SG-500 SmartPowerCube™

For 500 Watt operation in your base station or mobile, the SG-500 SmartPowerCube™ provides maximum reliability and unattended operation. The SG-500 is microprocessor controlled. It automatically monitors your power needs and selects the correct broadband filter. It also has the most advanced self-protection on the market. For maximum power, under the most demanding conditions, the SmartPowerCube is the professional's choice. • 1.8-24MHz • 500W PEP SSB, 500W CW with optional fan • Auto band switching • 6" h x 13.2" d x 10.8" w, 21 lbs. **\$1249.99**



MIRAGE



VHF/UHF AMPLIFIERS

15 to 300 watts of brute power! Models for 6M-70 cm, base, mobile, repeater or ATV operation • 12V DC • FM (SSB/CW on some models) • 20dB gain GaAsFET preamplifier • Overdrive and high temperature protection • Remote control capability

Model	MHz	Max Input	Max Output	Amps	Pre-amp	Price
A-1015G	50-52	1-15W	150W	23	yes	\$349.99
B-34	144-148	8W	35W	4	no	79.99
B-34G	144-148	8W	35W	4	yes	99.99
B-1018G	144-148	0.2-15W	160W	25	yes	369.99
B-2518G	144-148	20-35W	160W	25	yes	299.99
B-2508G	144-148	10-35W	300W	48	yes	689.99
B-5018G	144-148	20-60W	160W	22	yes	299.99
B-5030G	144-148	0.5-50W	300W	48	yes	669.99
B-310G	144-148	0.25-8W	100W	15	yes	179.99
B-320G	144-148	2.5-50W	200W	25	yes	429.99
BD-35	144/440	1-7W	45/35W	7	no	149.99
C-22G	222-225	2W	20W	5	yes	154.99
C-211G	222-225	2W	110W	20	yes	329.99
C-1012G	222-225	10W	120W	25	yes	329.99
C-1022G	222-225	10W	220W	20*	yes	689.99
C-2512G	222-225	30W	120W	25	yes	309.99
D-15N	425-450	2W	15W	3	no	169.99
D-26N	430-450	2W	60W	12	no	259.99
D-1010N	430-450	10W	100W	15	no	379.99
D-3010N	430-450	30W	100W	20	no	349.99
D-1010ATN	430ATV	10W	100W	20	no	399.99

N = Type-N connectors

*at 28VDC

RC-1 Remote Control Head For most Mirage amps. Power/preamp On/Off, SSB/FM mode switch. 18" cable. 1.25" h x 3.75" w x 2.25" d **\$45.99**

RC-2 Remote Control Head Same as the RC-1 but works only with the Mirage B1018G, B2518G and B5018G amplifiers **\$45.99**

DOCKING BOOSTER

Slide an HT in and it instantly becomes a mobile or base! Selectable voltages allow use of most HTs. Place on dashboard or desk, or use mounting bracket for security and convenience with tilt. Boost mobile or base station levels, up to 50W. • Replace HT battery • Requires 13.8 VDC

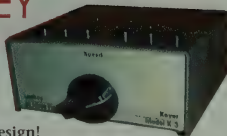
B-24G For 2m FM Handhelds Up to 50W output with 0.5-8W input • 18dB GaAsFET preamp with on/off switch • LEDs show preamp on, on air, and transmit • 4.25" h x 3.35" w x 3.25" d • HT adapters available, see Price Guide **\$109.99**



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LOGIKEY

IDIO Press

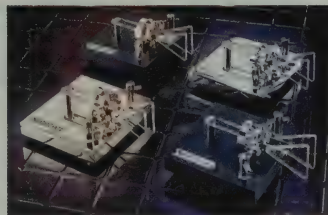


Full featured version of the famous Super CMOS III keyer design!

K-3 Non-volatile memory • 6 editable messages, 1,530 characters • Messages can include programmed functions like automatic contest numbers and speed changes • Message can allow paddle inserted text & loop for continuous replay • Linear speed control (5-60 WPM) • Adjustable weighting and monitor tone • Tune function • Auto character spacing if desired • Can emulate others, including Curtis "A" timing • Ultra Speed mode for messages up to 99 WPM • Contest serial numbers 001-9999, with push button decrement • Beacon capability • Full compensation for QSK rig timing • Keys solid-state or grid-blocked tube rigs • 12V DC, < 0.1 amp • 4.25" w x 2.25" h x 4.75" d **\$129.99**

HK-3 Hook-up kit for the K3 Includes Paddle-to-Keyer cordset; RCA-to-RCA keyer output cable and 2.5 mm DC power plug cordset for 12V **\$10.99**

BENCHER, INC.



IAMBIC & SINGLE LEVEL PADDLES

Affordable standard for CW operators world-wide.

BY-1 Black base **\$109.99**

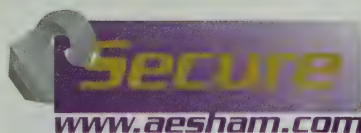
BY-2 Chrome **\$129.99**

BY-4 Black and gold **\$169.99**

Look For This

NEW

& Check Out AES' Latest Additions.



VIBROPLEX®

The Original Bug, c. 1904, is still made using tools similar to those used by inventor Horace Martin. Designed for 20-50 wpm.

- 110 Standard** Painted base/chrome top **\$169.99**
- 105 Deluxe** Polished chrome base and top parts with fine jewel movements **\$199.99**
- 100 Presentation** Polished chrome base and 24K gold-plated base plate and chrome top parts, fine jewel movements **\$269.99**
- 090 Gold** Gold-plated base, chrome top **\$309.99**



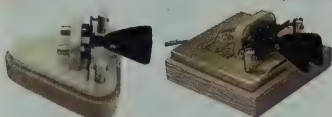
Vibrokeyers: Single lever paddle (left) initiates automatic dots and dashes of an electronic keyer. Iambic model (right) allows automatic dot/dash insertion.

Vibrokeyer

- 120 Standard** Black base, chrome parts. **\$149.99**
- 115 Deluxe** Chrome base and top parts with jeweled movements **\$184.99**
- 113 Gold** 24K gold-plated base and top parts with jeweled movements **\$279.99**

Iambic

- 135 Standard** **\$149.99**
- 130 Deluxe** **\$189.99**
- 125 Presentation** 24K gold-plated base and top parts with jeweled movements **\$249.99**
- 123 Gold** **\$279.99**



- 145 Brass Racer Iambic** (left) Solid brass iambic paddle on a polished hardwood base **\$129.99**
- 150 Square Brass Racer** (right) Solid lacquered brass iambic paddle mounted on a polished hardwood base. Magnetic action, no springs. **\$139.99**



Straight Keys (left) Unique mechanical action, unlike any straight key ever manufactured.

- 155 Standard** **\$149.99**
- 160 Deluxe** **\$189.99**
- 153 Gold** **\$279.99**

Deluxe Double Keys (right) Choice of iambic and straight or vibrokeyer and straight key. Double keys allow you to instantly switch from using an electronic keyer to the personal touch of a straight key.

- 165 Straight key/Iambic** **\$329.99**
- 170 Straight key/Vibrokeyer** **\$329.99**



TONESIGNALLING

NC-101 Encoder Micro-mini. CTCSS encoder, field tunable to any of the CTCSS tone frequencies between 67Hz and 254Hz. 5 to 15VDC. 0.60" w x 0.80" l x 0.15" h **NorFax™ #5040** **\$21.99**

NC-104 Programmable Encoder Sub-miniature field programmable CTCSS encoder unit for limited space. Provides standard 37 EIA CTCSS tones + 69.37, 97.4 and 205.5Hz. 7 to 24VDC. 0.625" w x 0.80" l x 0.170" d **NorFax™ #5150** **\$26.99**

NC-106 Programmable CTCSS Encoder/Decoder A sub-miniature crystal-controlled digital unit. Field programmable with dip switches providing any one of the standard 37 CTCSS tones + 97.4Hz. 6-24VDC. 0.85" w x 1.35" l x 0.28" h **NorFax™ #5230** **\$62.99**

NC-401 Touch-Tone® Decoder Unique micro-mini unit combining 2 distinct multi-addressable decoders for control of remote or local applications. Decodes all 16 DTMF characters with an address length of 1-14 characters and features EPROM memory for storage of both primary and secondary codes, input/output functions, deadbeat disable and user outputs, plus default reset. Programming easily performed by means of a conventional DTMF encoder. 6-24VDC. 0.80" w x 1.37" l x 0.23" h. **NorFax™ #5545** **\$62.99**

NorFax™ auto fax retrieval system - 530-477-8403

UM Unified Microsystems

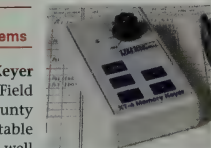
XT-4 CW Memory Keyer Designed for QRP. Field Day, mobile CW county hunting - any portable operation. Also goes well in the shack with smaller rigs. 8-45 WPM. Memories: 4 with 100 Morse characters each positive keying output only via RCA phono jack output. 1/8" (3.5mm) stereo jack input. Paddle reverse for left or right-hand operation. Auto power save mode w/flashing LED engages after 30 min. of inactivity. Requires 9V alkaline battery **\$69.99**

KC-4 Cable set for XT-4 **\$9.99**

VK-64 Combination CW and Voice Keyer Store and play back CQs, contest exchanges, etc. in both CW and voice. Voice keyer has 4 memories (up to 15 seconds each). Set CW keyer between 10-45 WPM (4 memories programmable with 300 characters each).

- Configure for iambic A/B keying, weight, side tone, and paddle reverse • Tune function • Auto repeat and 1/2 to 12-second delay (CW and message #1) • Run stand alone through panel or control with PC/laptop through printer port (standard 25-pin) • Use with major contest logging programs • 12V wall transformer power supply **\$229.99**

VKC-8 Cable Shielded audio cable semi-kit wired and tested except for microphone and transmitter connectors (8-pin) **\$24.99**



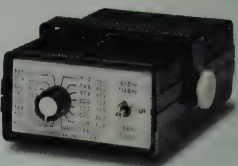
COMMUNICATIONS SPECIALISTS, INC.

TOE ENCODERS & DECODERS

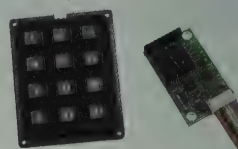
SS-64 Programmable CTCSS Encoder Super small for easy install in most HTs. Standard with 64 EIA tones between 33 and 254.1Hz. Individual tones dip-switch selectable 0.66" x 1.08" x 0.21", requires 6-28 VDC **\$28.99**



TS-64DS Field programmable CTCSS Encoder/Decoder DIP switch programmable for 64 EIA tones 33-254.1Hz. 1.25" x 2", 0.3", 6-28 VDC **\$57.99**



TE-32 Multi-tone Encoder Provides direct access from a front dial rotary switch to all EIA CTCSS tones from 67.0 to 203.5Hz, allowing users to access various repeaters. Great for mobile or test bench. 5.25" x 3.3" x 1.7", 6-30 VDC **\$49.99**



ID-8 Multi-Featured Automatic Morse ID'er Programmable via 12-button pad • Eight changeable messages • 200 characters total • CW speed: 1-99 wpm • ID interval timing: 1-99 min. • ID hold-off timing: 0-99 seconds • CW tone: 100-3000Hz • 6-20VDC • 1.85" x 1.12" x 0.35" **\$69.99**

Wiring diagrams and lists of Fax-on Demand documents can be obtained from www.com-spec.com.



Combination Code Practice Oscillator and CW Monitor Volume control, 3" speaker, & headphone terminals. Requires a code key and a 9V battery **OCM-2K Kit \$19.99 OCM-2W Wired \$24.99**



K-1 (left) Low-cost general purpose key w/phenolic base, adjustable tension, contact spacing. **\$10.95**

K-4 (right) Deluxe high quality key. Polished brass base, shorting bar **\$16.95**



FOR LEARNING/PRACTICING CODE

414 Professional Classroom Tutor Features include LCD readout, printer port and audio tape recording output. Build and save 3 custom sets for extra practice. Or combine these to obtain 48 characters for using the KOCH method. Customize random words for practice. Use with 144/440MHz FM HT or HF transceiver for on-air code practice. VECs can give up to 16 exams. Full-featured memory keyer (1000 character memory, semi/auto modes, iambic A/B, reverse paddle, change speed and tone on-the-fly). Practice sending into the 414 with iambic paddle or straight key. Use built-in or external speaker or headphones. Includes serial port cable and open-end patch cable. 12 VDC or 110 VAC. 8.5" w x 2.25" h x 6" d. **\$189.99**



554 Code Practice Oscillator Designed for classroom use with great sound that enhances learning of Morse code. Plenty of volume from a built-in 1W amp and 3" speaker. Volume control and adjustable tone control (400-1000Hz). On/off switch, power ON LED, 1/4" key jack, 3.5mm external speaker jack and DC input jack. Requires 12V DC. All-metal enclosure. 4.25" x 1.5" h x 5" d. **\$79.99**

550 Telegraph Key..... **\$7.99**



AIDED CW SENDING/RECEIVING

452 Super CW Keyboard (left) A stand alone CW keyboard that includes an RFI suppressed keyboard, a two line 16-character non-volatile LCD display. Send effortless CW by just typing the characters as you see what you are sending on the display. No computer to boot up, no program to load. • Speed: 5-100WPM • Weight: 5-95% • Sidetone: 300-3000 Hz sidetone • Serial Numbers (0-9999) • Has buffer and memory full audible indicators. Keys solid-state and tube-type rigs. Requires 12VDC..... **\$129.99**

462B MultiReader (right) Supply this unit with audio from a receiver or transceiver; tune in CW, RTTY, ASCII or AMTOR (FEC) signals; and read the auto decoded text directly from the 2-line, LCD display. • Copy most standard shifts and speeds in all modes • AutoTrak™ feature helps track and decode high speed CW • 8K memory stores several pages • PLL modem technology digs out weak signals • Precision tuning indicator • Printer port • 6.25" w x 2.5" h x 6.25" d • Requires 12VDC..... **\$169.99**

461 Pocket-Size Morse Code Reader

No cables to hook-up and no other equipment needed. Simply hold the unit near your receiver and it instantly displays CW text in English! Automatic speed tracking and instant 140-character replay on a 32-character LCD. If desired, a serial port lets you display CW text on a monitor using a computer and terminal program. Connect directly to a receiver with optional cable when it's too noisy or CW is unwanted. • Battery saver (uses 9V - not included) • 2.25" h x 3.25" w x 1" d, 5.5 oz..... **\$79.99**



5162 Receiver Cable Connects the 461 to a radio's external 3.5mm jack **\$5.99**



464 CW Reader With Built-In Keyer This unit simply plugs into a transceiver's speaker/phone jack and key jack. Add a single or iambic paddle or computer keyboard and it's ready for easy, complete CW operation. Sends and reads CW at 5 to 99 WPM with automatic speed tracking. • Easy menu operation • Large 2-line LCD shows "send and receive" text • Front panel speed and volume controls • 4 message memories • Type-ahead and read-again buffers • Adjustable weight and sidetone • Built-in speaker • RFI proof..... **\$169.99**



KEYERS

407D Deluxe Electronic Keyer Features dot-dash mem., self completing dots and dashes; jam-proof spacing. RF proof, instant start. Single squeeze, or straight key. Front panel controls: speed, weight, tone & volume, ON/OFF, tune, auto or semi-automatic. Selectable A or B-type iambic keying. Built-in speaker, uses 9V battery. 7" w x 2" h x 6" d.. **\$69.99**

401D Econo Electronic Keyer II Similar to 407D with external speed and volume controls, internal weight and tune controls. Uses 9V battery **\$49.99**



434 Contest Voice Keyer™ Microprocessor-controlled, transformer-coupled - No RFI, hum or feedback. Automatically call CQ and send a call. Store frequently used phrases, like "CQ. Contest this is AASMT," in your own voice. Record and play back five natural sounding messages totaling 75 seconds. Repeat messages continuously and vary the delay from 3-500 seconds. Receive and play back off-the-air signals. Easy to use - plug in an 8-pin microphone cable then plug the 434 shielded cable into the mic input. Controls tailor audio level to match your voice. Built-in speaker and audio amplifier. Uses 9V battery, 9-15VDC or AC with optional adapter. 6.5" w x 2.5" h x 6.5" d **\$169.99**

422D Keyer-Paddle Combo

Keyer unit installs on top of Bencher iambic paddle. Uses Curtis™ chip. 9 to 50 wpm. Adjustable weight and tone, dot-dash memory and sidetone. Semi-automatic and tune or auto modes. Keys grid block, cathode or solid state. Uses 9V battery or AC adapter. 4.125" x 2.625" x 5.5" d. **\$159.99**



490 Keyer/Benchner Paddle Combo A feature-rich keyer in a compact configuration that fits right on its own Benchner iambic paddle. Provides memories, morse trainer, sidetone, automatic serial numbering and more. 5" w x 3" h x 5.5" d. Uses 9-volt battery or 110 VAC with MFJ-1312D..... **\$199.99**



492 Menu Driven Memory Keyer No complex sequences. Save messages, enter iambic, semi-auto, handkey, message queue, paddle modes. Select iambic A/B, Morse trainer, store starting serial numbers. Holds 192 characters in 4 memories (expandable to 8K+ characters in 8 memories. Front panel speed (5-100 WPM) and volume control for sidetone speaker. Direct and grid block keying. 9V battery or 110V AC adapter. 6.5" x 2.5" x 6.25" **\$89.99**

451 Morse Keyboard Stand-alone CW keyboard with 200 character type-ahead buffer, and two 100 character messages. Requires 12VDC..... **\$99.99**

452 Morse Keyboard with 16 character LCD display. Comes with keyboard **\$129.99**



495 Millennium CW Keyer A powerful keyer combining the latest microprocessor technology with non-volatile memory. Easy-to-use menus and LCD display - send CW, load messages and set functions using a paddle, keyboard or serial port. Iambic mode works with direct or grid-block outputs. • PTT output, built-in speaker, sidetone • Iambic keyer with dot and dash memories • 32 message memories • Repeat message continuously • Insert timed pauses, auto-incrementing serial number, or embedded commands to change speed, weight, etc. • Message editing capability • Input queue to store multiple messages • Digital and analog linear speed control • Farnsworth method with speed from 10 - 99 wpm • Type-ahead keyboard buffer • Dual user/configuration mode..... **\$149.99**





Microphones & Accessories

Defining the Standards for
Amateur Radio Communications

GM Series

FULL RANGE DUAL ELEMENT MICROPHONES

Provides full-range, smooth and articulate audio for AM, FM and "HI-FI" SSB. The wide 60–16 kHz frequency response, with a +4 dB midrange peak @ 2 kHz, produces brilliant articulation for clear, understandable SSB audio, and adds a well-balanced robust low end. In addition, the GM comes equipped with a second HC-4 or HC-5 element for *extra punch* when you need it.

The diecast body is finished in high lustre black lacquer and topped with a crushproof golden grill. A "wide-narrow" switch selects the second element, and a "soft touch" microswitch provides smooth, noise free PTT operation. Requires a CC-1 adapter cable.

GM-4 GM with Full Range and HC-4 elements **\$140.99**

GM-5 GM with Full Range and HC-5 elements **\$140.99**

GM-V "Vintage" GM – A built-in matching transformer allows its use with older rigs like Collins, Hallicrafters, Johnson, etc. Uses the Full Range element and switchable Passive EQ circuit or an alternate narrow, more articulate response. **\$155.99**



the CLASSIC 1930s Replica

An exact replica of the RCA 74B broadcast microphone. High quality, all metal construction - no plastic. Dual elements, featuring the new PROLINE broadcast dynamic element with a 50-18kHz response, plus your choice of the second communications element, easily switchable from the back panel, along with the 'soft touch' PTT switch. Dual impedance – a small slide switch on the bottom selects 600 or 30k ohms. The stainless steel trimmed cast steel base is removable and the logo can be rotated for inverted mounting on the new PL-2T Heil PROLINE boom. Requires a CC-1 cable. Heil Sound mails your call letters after purchase.

HCL-5 (w/HC-5)... **\$229.99** • **HCL-4** (w/HC-4)... **\$229.99**

HCL-IC for early ICOM–prePRO.... **Special Order \$229.99**



the ICM High Performance Microphone for early (pre-PRO) ICOM transceivers

The f.e.t. electret element provides plenty of drive, great sound and plenty of punch for those older ICOMs that lacked enough gain to work well with high quality Heil or other dynamic elements. When using it with the high gain inputs of the new PRO series, simply reduce the microphone gain to acceptable ALC levels.

Beautiful platinum finish, soft touch PTT switch. Has an attached 8-pin ICOM cable with jack for the FS-2 foot switch or HS-1 hand switch. Fits all Heil booms and shock mounts..... **\$89.99**

'HERITAGE' Professional Cardiod Dynamic Studio Microphone

HHG A replica of the famous "Elvis" microphone of the 1950's. The finish is a special "showchrome" where the steel body is heavily chrome plated and the finish looks about 6 inches deep. Houses the Heil PROLINE commercial 600Ω balanced output broadcast element (3-pin XLR). Outperforms many \$1000 studio microphones..... **Special Order \$165.99**

CB-1 Optional Classic Base (above)..... **\$65.99**



STUDIO-STYLE MICROPHONES

Old favorites upgraded with a new body and PTT switch like the GM series. The HM-10 comes with your choice of a HC-4 "DX Dream Machine" or HC-5 "Full Range Articulation" element. The HM-10 Dual contains both the HC-5 and HC-4 elements (switch selectable), a choice for varying conditions. Both need a CC-1 cable.

HM-10-4 (HC-4) or **HM-10-5** (HC-5)..... each **\$65.99**

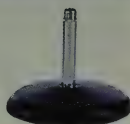
HM-10-DUAL (HC-4 and HC-5) **\$115.99**



HAND MICROPHONES

HMM Dual Element – Heavy duty, commercial quality. Uses a "Full Range Dynamic" element and a switch selectable HC-4 "DX" element. Internal noise cancelling cavity reduces background pick-up. The coiled cable is terminated with an 8-pin plug for KENWOOD or YAESU (specify); for ICOM radios each **\$78.99**

HMM-IC Single Element – Same as HMM, but contains a HEIL "Electret Condenser" element designed specifically for outstanding performance with ICOM radios (no HC-4 or switch)..... **\$58.99**



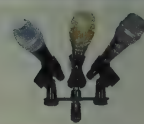
TB-1 Table Base Mount

A heavy, 2 lb. 10 oz. cast steel desk stand. 6" diameter x 1" high with a 4" high chrome 5/8" x 27 microphone mount... **\$25.99**



CB-1 Classic Base

A reproduction of an RCA microphone base. Heavy, 2 lb. 7 oz. lb. cast steel with stainless steel trim. Dim: 4" w x 6-1/2" d x 3-3/4" h with 3" 5/8" x 27 thread mount... **\$65.99**



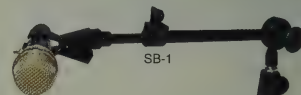
TM-1 Tri-Mount

Mount up to three microphones and attach to 5/8" x 27 thread mounts for convenient multi-rig operation..... **\$14.99**

Microphones shown on mounts are not included

SB-1 Small Microphone Boom

Extends from 10 to 20 inches, with angle adjustments for positioning. Standard 5/8" x 27 thread mic. mount and "C" clamp table mount **\$33.99**



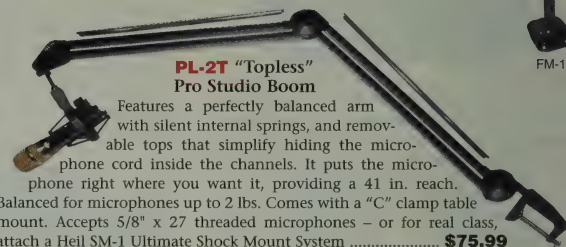
FM-1 Flange Mount

Mount Heil booms directly to table top..... **\$15.99**



RS-1 Riser

A 12" high flange mount – allows the PL-2T to mount behind the radio so the boom can be brought down into position OVER the radio **\$25.99**



PL-2T "Topless" Pro Studio Boom

Features a perfectly balanced arm with silent internal springs, and removable tops that simplify hiding the microphone cord inside the channels. It puts the microphone right where you want it, providing a 41 in. reach. Balanced for microphones up to 2 lbs. Comes with a "C" clamp table mount. Accepts 5/8" x 27 threaded microphones – or for real class, attach a Heil SM-1 Ultimate Shock Mount System **\$75.99**

SM-1 The Ultimate Shock Mount System

For GM, HM-10, or "icm" microphones. An 8-point flexible suspension supports and isolates microphones from mechanical vibrations. The 3/8"-27 threads mount to the PL-2T and other standard microphone stands and booms. Great 'studio' look!..... **\$50.99**



Microphone not included

ADAPTER CABLES/ SWITCHES ETC.



AD-1 Adapter Cord – For PRO-SETS (specify radio)..... **\$17.99**

AD-100 Microphone/Boomset Adapter – Allows use of all HEIL products with the YAESU FT-100 series. Solves the problem of the multiplexed microphone, touch tone audio and control data appearing on the microphone line.... **\$25.99**

CC-1 Adapter Cord – Required for the GM, and HM's. Matches Collins, Drake, Icom, Kenwood, Ten-Tec or Yaesu radios. The 6 ft. cable is wired with a 1/4 in. female jack to accommodate the plug from a FS-2 footswitch or HS-1 pushbutton hand switch. For collins with 3/16" plug – add \$3.00.... (Specify radio) ea. **\$30.99**

FS-2 Dual Footswitch – Heavy duty and ergonomically correct with the hinge UNDER the heel. Two 10 amp switches activate in sequence for transceiver and amplifier control. Separate control cables with standard phone plug..... **\$38.99**

HD-AT Headphone Attenuator/Adapter – Allows 1/4 in. headphone jacks to plug into a 1/8 in. jack. Contains a -6 db pad which reduces output and allows use of HEIL headset with FT-100 or IC-706 without overload and distortion.... **\$5.99**

HS-1 Pushbutton Handswitch – Plugs into CC-1 jack for PTT control of your radio. A 6 ft. cable terminates into a 1/4 in. phone plug..... **\$25.99**

XT-1 Matching Transformer – A sub-miniature unit that matches Low-Z microphones to High-Z inputs used in older Collins, Drake, Hallicrafters, etc..... **\$15.99**



Headsets/Boom Microphones



The **Heil QUIET PHONE** series is a result of years of research and development at Heil Sound. Normal headsets are designed to reproduce audio and pay little attention to the outside environment. In most cases, the surrounding background noise is louder than the audio that you are trying to hear in the headset.

Heil Sound applies a unique active Noise Canceling Technology using two small out-of-phase microphones and a differential amplifier inside the headphones. They pick up the outside ambient noise as well as the audio information. Using the phase information the differential amplifier reduces sounds under 400 Hz up to 70%. The result is a dramatic reduction of ambient noise as well as noise from blowers, jet engines, the TV in the next room and other operators in the shack.

PRO-SET QUIET PHONE

The Heil PRO-SET needs no introduction. It's a lightweight headset/boom microphone with a flexible boom and a choice of microphone elements. It has become the de facto standard for leading DX and contest operators worldwide but now, the PRO-SET is available with the exclusive Heil 'QUIET PHONE' Active Noise Canceling Technology. It's the first and only headphone to bring you active noise cancellation as well as a second Heil exclusive – switchable Speaker Phase Reversal that changes the audio from being heard 'centered' in your head, to a spatially widened effect. This feature greatly reduces listening fatigue and in some conditions can reduce noise and enhance intelligibility. This has never been done before and you now have it all in the new Heil PRO-SET QUIET PHONE. The in-line battery box contains the phase cancellation and phase reversal components and a PTT control button. All PRO-SETS require an AD-1 adapter cable (specify radio).

PSQP-4 with Heil HC-4 "DX" element	\$199.99
PSQP-5 with Heil HC-5 "Full Range" element	\$199.99
PSQP-IC with Heil 'ic' Electret element and cable for Icom only.....	\$216.99

Original PRO-SETS without QUIET PHONE feature

PRO-SET 4 with Heil HC-4 "DX" element and Phase Reversal Switch	\$130.99
PRO-SET 5 with Heil HC-5 "Full Range" element and Phase Reversal Switch	\$130.99
PRO-SET- IC with Heil 'ic' Electret element and Phase Reversal. For Icom only, cable included....	\$147.99



PRO-SET-PLUS Headset/Boom Microphone
Maximum comfort and noise seal is provided by full cover leatherette earpads with removable cotton covers. The cushioned inner headband is self-adjusting for a perfect fit, and the boom swings 180° for left or right side operation. Includes switchable, dual microphone elements; the Heil HC-5 for normal operation, the HC-4 for DX. The boom and top headband have rugged but flexible internal steel bands that can be adjusted as you wish. Great sound from frequency tailored speakers mounted in tuned cavities, and a phase reversal switch changes the sound field from being "centered" in your head, to a spatially widened effect. This feature greatly reduces listening fatigue and can reduce noise and enhance intelligibility. Requires AD-1 adapter cord (specify radio). **\$189.99**
PRO-SET-PLUS-IC same, but for Icom radios. Includes AD-1ic adapter cord **\$206.99**



BM-10 Series Headset/Boom Microphones – A lightweight, soft and comfortable boomset for prolonged use in contests, etc. The boom microphone is available with the Heil HC-5 "Full Range" or HC-4 "DX" element. The cord is wired with 1/4" stereo plug and 1/8" transmit audio plug and requires an AD-1 adapter cord (specify radio)

BM-10-4 with the HC-4 element.....	\$89.99
BM-10-5 with the HC-5 element.....	\$89.99
BM-10-IC Has an FET Electret element for Icom radios, includes adapter cable.....	\$106.99
BM-5 Series Same as the BM-10 but with a Single Headphone. Great for mobile!	
BM-5-4 with Heil HC-4 "DX" element.....	\$69.99
BM-5-5 with HC-5 "Full Range" element.....	\$69.99
BM-5-IC with HC-5 "Full Range" element, designed for Icom radios.....	\$86.99

TRAVELLER

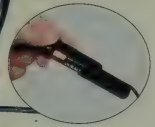
Single-side Headset/Boom Microphone – Uses a high performance electret element and features Up/Down and PTT in-line switches. Includes a 3 ft. interface cable. Lightweight and comfortable, usable with left or right boom position.

Traveler-K for 8-pin KENWOOD	
Traveler-KM for modular KENWOOD	
Traveler-706 for the IC-706	
Traveler-8PIC for 8-pin ICOM	
Traveler-YM for the modular YAESU	

\$89.99
each



**New
Larger &
Softer
Earpads!**



QUIET PHONE

Active Noise Canceling Headset

- Incorporates Heil 'QUIETPHONE' Technology
- Soft Leatherette cushions with adjustable headband to insure most comfortable listening for extended periods of time.
- Operates on a single "AA" cell for 30 hours providing clean high fidelity dual channel audio.
- Right angle 1/8 in. plug works with most CD or MP-3 players and angle allows plugging into the audio jack located in the arm rest of commercial airliners. A 1/4 in. stereo adapter is included for use with your ham equipment.
- Folds flat for EZ carrying.

**HQP
\$99.99**



Joe Walsh
WB6ACU



PROLINE – designed for commercial broadcast, studio recording and concert sound. A smooth, wide range response is provided by the PROLINE element which uses a powerful magnet structure of Neodymium, Iron and Boron with a 1-1/8" aluminum alloy, low mass voice coil assembly and combined with a balanced 600 ohm output.

HHG HERITAGE PRO

- The 'Elvis' microphone of the 50's
- Deep 'showchrome' finish
- Shown with optional desk stand

Special Order – \$168.99



PR-20 PROLINE

- The most natural and cleanest sounding audio – outperforms \$1,000 mics.

Special Order – \$168.99



HCLP CLASSIC PRO

- Replica of a 1930's RCA model
- Base can be removed allowing inverted mounting on a Heil PT-2T studio boom

Special Order – \$269.99



QZ/5 Passive Noise Reduction (right) Isolates listener from noise sources like car and jet engines. Ideal for the race track and metal detection! Unique head-strap, velcro design allows for secure fit and immobilization. 60Ω impedance • 102dB SPL/1mW sensitivity • 40-20,000Hz sensitivity • Volume control and stereo/mono switch • Single entry, 8' coiled cord, 3.5mm plug • 15 oz **\$49.99**

QZ/50 Revolutionary Active Noise Reduction (left) Reduces harmful and annoying low frequency sounds in noisy environments. Behind-the-head design provides comfort during extended wearing. Dynamic element, 30-20,000Hz • 32Ω impedance • 98dB sensitivity • Single entry 8' cord, 3.5mm plug • Requires AAA battery • 2.5 oz **\$49.99**

QZ/99 Passive Noise Reduction Stereophone with Mono/Stereo Switch Frequency response: 40-20,000Hz • Coiled, single entry, 8' cord with 3.5mm/6.4 mm plug • Sensitivity: 102dB SPL/1mW • Impedance: 60 Ω • 15 oz **\$59.99**



QZ/2000 Noise Reduction Stereophone Revolutionary Active Noise Reduction reduces harmful/annoying low frequencies • >15dB SPL from 40-200Hz; average 10dB SPL from 30-1000Hz • 15-20,000Hz response • Straight, dual entry, 4' cord • Compact control case and collapsible stereophone • Adjustable headband • Input jack for audio play-through and 2-prong adapter for in-flight use • 101 dB SPL/1mW sensitivity • 5kΩ impedance • Includes 2 AA's • 2.3 oz **\$149.99**



KTX/8 Portable Stereophone Dynamic element for extended frequency response from 40-20,000 Hz • Foam ear cushions for open, hear-through sound • Volume control on the cord for easy level adjustment • Collapsible headband design for protective storage and maximum portability • Reliable "L" plug for improved durability and reliability • Straight, single entry 4' cord **\$14.99**

Y-88 "Y" Cord Delivers dual stereophone connection from a single sound source. Reliable "L" plug for improved reliability and durability **\$4.99**

PREMIER communications

SPM-100 Small Speaker/Mic This is a lightweight, compact unit. The microphone features a high-quality condenser-style mic element and high-fidelity audio circuit that produces excellent transmitted audio clarity, as well as a powerful speaker. It may be secured to the user's lapel or shoulder **\$27.99**



SPM-400A Mini Boom Mics The SPM-400A headsets include an in-the-ear speaker and a rubber-covered earloop design that adjusts to comfortably fit either the right or left ear of any user. The unit features an in-line Push-To-Talk switch that can be clipped to the user's lapel or belt **\$37.99**

See the Price Guide to find correct model numbers for your specific brand of radio.



YAESU
Choice of the World's top DX'ers™



MD-200A8X Ultra-High Fidelity Desktop Microphone Designed for use with the MARK V. Employs a studio-quality, wide range (30-17000Hz) dynamic element optimized for high fidelity SSB. Exclusive Variable Side Pressure Control allows adjustment of overall frequency response from natural, high-fidelity sound of everyday S-9+ rag chewing, to high-articulation with a moderate peak above 1500Hz for DX or contests. • Aluminum die-cast base with locking and momentary PTT switches • Up/down scanning switches • Housing can accommodate favorite DX or contest mic element • Also works with FT-847, 857, 897, 920, 1000MP, FIELD, also 1000/1000D without "TX" LED • Includes dual-connector cable with regular & modular plugs • 4.7" w x 12.6" h x 4.9" d, 2.2 lbs **\$379.99**

KENWOOD

HS-5 Deluxe Headphones Specifically designed for use with communication systems. Provide natural sound and eliminate pressure, permitting long hours of fatigue free listening. To increase the volume level, when you are using the headphones in a noisy room or want privacy; replace the ear-pads with the vinyl leather, pressure fit ones, increasing the sound pressure by about 10dB while sealing out noise. (both pads included). Includes 6 feet connecting cord with plug. • 8Ω impedance • 200mW @ 1000Hz max. input • 150-4000Hz (-6dB) frequency response • Approx. 350g **\$79.99**



HF-24RS Scanner Headphones Designed specifically for racing fans. • Listen to driver/pit conversations with reduced noise • Snug fit, cushioned headband and comfort fit cushions allow hearing action over crowd and engine noise • Dual volume control to maximize hearing levels • Includes 3.5mm, premium-gold, right-angle plug with a 10' coiled cord **\$19.99**



HEADSET MICS

288 Deluxe Headset Microphone (left) Lightweight, comfortable for Yaesu, Icom, Kenwood units. Superb transmit audio, and earphone tonal quality. Foam covered microphone element is attached to headset with a flexible rubber boom allowing proper positioning. PTT switch attached to 6' cord, hold or attach to clothing ea. **\$24.99**

292Y Featherweight™ Earphone/Mic (right) Has an earbud earphone and a tiny thumb-sized microphone/PTT switch that's built right into the 4 ft. cord. Works with Icom Q7A, Yaesu FT-10R, FT-40R, FT-50R and VX series transceivers **\$17.99**

MICROPHONES

297 Desk Mic (left) A sensitive condenser mic element coupled with a low-noise amplifier. Speech tailored - select SSB Mode for smooth, articulate DX or Full-range Mode for clear FM or AM. Flexible microphone boom, momentary and locking PTT switch. On-the-Air LED indicator, frequency up/down switch. • 4" w x 1.25" h x 6" d base • Requires 2 AA's **\$69.99**

5397 8-Pin Adapters for 297 Available for Yaesu, Icom and Kenwood units ea. **\$15.99**

295 Mini Speaker Mic (right) For popular Yaesu, Icom and Kenwood handhelds. Uses a non-directional electret element. Transmit LED..... ea. **\$15.99**

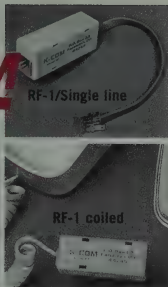


HEADPHONES

392B Perfect for amateur and shortwave listening. Superb padded headband/ear cushion design, only 8 oz. High-performance drivers with full 100Hz-24,000Hz response provide enhanced sound & speech fidelity. Earphones have individual volume and tone controls. Gold-plated plug, 9' cord and 1/4" adapter (mono/stereo) included **\$19.99**



K-COM



TELEPHONE RF INTERFERENCE FILTERS

Cure telephone RF interference in the most irritating cases even when dealing with transmitters with full legal power output. Use any number of filters with no adverse effect on telephone performance.

RF-1 For single line equipment including wired or cordless phones, answering/fax machines, modems, etc. Uses standard modular connectors **\$16.99**

RF-1/2-LINE For 2-line or multi-line, multi-station electronic key phone systems..... **\$22.99**

RF-1/COILED For use when RFI enters thru coiled telephone cord between base and handset **\$22.99**

RF-2 Hard-wired, provides a wide range of installations optional to add RFI rejection at a variety of physical/electrical locations in the system; inside jacks, behind wall mounts, etc..... **\$10.99**

VECTRONICS®



LP-30 (right) Low Pass Filter Suppress TV interference from HF transmitters. Use between transmitter and antenna or tuner. Up to -70dB attenuation of harmonics falling in TV bands. For 52Ω, up to 30MHz and 1500W RF continuous power. **\$69.99**

LP-2500 Rated for 2.5KW continuous.. **\$129.99**

HPF-1 (left) High Pass Filter Install at TV antenna terminals. Stops interference caused by overload or harmonics from HF transmitters operating below 30MHz. High harmonic attenuation but low loss in the 52-550MHz TV passband. For 300Ω (balun and Type-F connector supplied for 75Ω)..... **\$24.99**



High Pass Filters Stop TV, FM and VCR interference caused by harmonics or overload. Installs at TV or VCR antenna terminals or connector. Sharp frequency cutoff at 52MHz with 70dB attenuation below 50MHz.

HP-300T (300Ω) or **HP-75T** (75Ω).....ea. **\$12.99**

DCI DIGITAL COMMUNICATIONS



BANDPASS FILTERS

Install between a 2m, 220 or 440MHz rig and antenna to reduce strength of out-of-band interfering signals while allowing wanted signals to pass through at full strength. Eliminate squeals, squawks, beeps and strange voices from a UHF or VHF radio caused by intermodulation from strong, nearby pagers, police radio, etc. Effectively reduces spurious emissions on transmit. Hear desired signals even in crowded, urban centers • Design: 2M/220MHz - 4 helical resonators; 440MHz - four 1/4-wave linear resonators; both with aperture coupling • VSWR 1.5:1 • 200W rating • Made of extruded aluminum, copper and brass • 12w"x 3"h x 5"d • 2 lb, 11oz

146-4H 144-148; Loss <1 dB; Selectivity: -57dB @ 136MHz and -43dB @ 156MHz. SO-239 silver-terfon connectors..... **\$99.99**

146/444DB 144-148/438-450MHz; Selectivity: -50dB @ 136MHz, -40dB @ 156MHz, -30dB @ 425MHz, -25dB @ 465MHz. SO-239 silver-terfon connectors..... **\$169.99**

145-2H 144 to 146MHz **\$99.99**

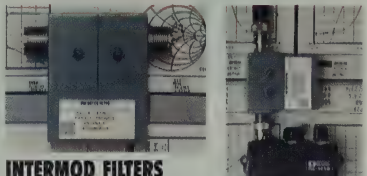
223.5-3H 222 to 225MHz Loss 1 dB; Selectivity: -33dB @ 233 3MHz and -28dB @ 233 MHz. SO-239 silver-terfon connectors..... **\$109.99**

445-10C 440-450MHz; Typical selectivity: -47dB @ 425MHz, -50dB @ 456MHz; Loss 1dB. Type-N silver-terfon-gold connectors..... **\$119.99**

435-10C 430 to 440MHz..... **\$119.99**

Upgrade to type-N connectors on 2m and 220MHz models - add \$10 to price; Special Order

PAR ELECTRONICS



INTERMOD FILTERS

Solve most intermod or front end overload problems from paging systems, etc. with these asymmetrical, 45-54dB notch filters. Centered on the offending pager spectrum of 152-153MHz, they work effectively with a loss of ≤0.5dB and a 1.25:1 VSWR. Works with dualbanders by providing a low-loss pass-thru of 70cm signals.

VHFDN152 2m base/mobile intermod filter, rated 50W, SO-239 connectors, 2"h x 1"d x 2 1/2"w **\$69.99**

VHFTN152-158 Triple Cavity Similar to the VHFDN152 except it places a second notch in the 158MHz pager band in addition to the dual notch in the 152 MHz band. 2 1/2"h x 1"d x 3"w..... **\$82.99**

VHFDN152HT 2m intermod filter for handhelds BNC connectors, 20W. 1 1/2"h x 3/4"d x 2"w.. **\$68.99**

UHFDB450 UHF intermod filter for base or mobile. Blocks pagers & two-way transmitters that cause 70cm intermod; transparent to 2m.. **\$69.99**

UHF-12 12" Belden RG-58/U jumper cable with silver/gold/teflon PL-259's on each end **\$9.99**



YA-1 The best general purpose low pass filter available. Check the specs at www.bench.com! 1kW, 80db attenuation @ 50MHz..... **\$85.99**

MFJ MFJ ENTERPRISES, INC.

704 50Ω Low Pass Filter

Install between HF transmitter and antenna to reduce TVI from harmonics that fall in the TV band. Handles 1kW from 1.8 to 30MHz.... **\$49.99**

711 75Ω High Pass Filter Install at TV/VCR antenna input to reduce/eliminate interference from HF transmitters operating up to 30MHz.. C/O **\$19.99**



784B Super DSP Filter Eliminates those hydrodines; reduces noise and interference on SSB/CW/AM, digital modes, VHF, EME, satellite. Tunable FIR filters minimize ring, prevent data errors. Up to 60dB attenuation. Tunable Spotting Tone™ auto tunes CW filter in narrowest bandwidth. 2W audio amp with AGC. 12V DC or 110VAC with MFJ-1315. 2.5"h x 9"w x 6"d..... **\$229.99**



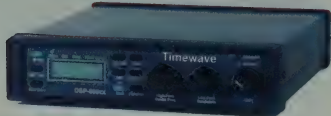
701 RF Free Choke Kit Eliminate common RFI problems by winding offending cables around an RFI suppressing toroid. Effective from 0.5-200MHz. Separates into halves for easy winding of all types of cable: computer ribbon, TV coax, power cord, telephone wire, audio-video cables. Halves mount in snap-together plastic frame. For severe RFI problems and larger cables, multiples can be stacked for more effect. (Pack of 4 toroids)..... **\$14.99**



HI-Q Common-Mode™ Filters For tough RFI problems. Lowpass filters eliminate harmonic-type interference but are not capable of filtering out "Common-Mode" (differential noise energy transfer between transmitter and ground including stray capacitance). For cleaner signals, add an RF Inquiry filter. • 1.8-70MHz • -50 to -60db below 250MHz common mode attenuation • Insertion loss: less than 0.1dB • 50Ω impedance • Connectors: SO-239 teflon

CF250E-UHF 250W, .98 x 10 in. 0.5 lb. **\$89.99**

CF5KV-UHF 5KW, 2.1 x 12.6 in., 1.3 lb **\$124.99**



DSP-599ZX Noise Filter Digital Signal Processing provides superior reduction of QRM and QRN • Incorporates the newest high speed CPU that gives unparalleled features and is field upgradeable • Exact filter settings seen through the LCD, push buttons, and "Visible Memory" • Optical encoders for continuous tuning of filters • Examines and measures signal and noise correlation, dynamically filtering out undesired noise • Data and bandpass filters with steep skirts and linear phase response for CW and RTTY • Bandwidths range from 10Hz-600 Hz, and center frequencies from 200-2150Hz • Wider filters allow easy tuning and listening to multiple CW signals simultaneously • Supported data filters are RTTY (two methods of use), AMTOR, PacTOR, G-TOR™, HF Packet, SSTV, WeFAX, SITOR and CLOVER • Test instrument mode provides audio sine wave generator, audio millivoltmeter and two-tone audio generator for maintenance/set-up of audio circuits in radios • VHF/UHF weak signal and aurora provides remarkable improvement in clarity • Improves readability of distorted aurora SSB signals **\$436.99**



ANC-4 Antenna Noise Canceller And Diversity Combiner Works with any transceiver (250W or less) or receiver for voice, data and CW from 500kHz-80MHz. Reduces or eliminates locally-generated power line, computer and TV noise. It cancels noise before it affects AGC circuits. Frequently, reception of signals well below noise level is possible. Connects between antenna and connector. A second antenna acts as a noise pickup. Front panel controls allow adjustment of signal phase and magnitude. The ANC-4 also operates as an active antenna using a noise antenna and noise gain control to amplify antenna output. And, it can be used as a diversity combiner to pick up weak signals or null interfering signals. Requires 11-16V DC @ 300 ma. 1.7" h x 6" w x 4.3" d, 2 lbs..... **\$209.99**

KENWOOD



LF-30A Low-Pass Filter Suppresses harmonics contained in RF signals from HF transmitters, reduces possibility of TVI/BCI. 30MHz cutoff for 160-10M operation. Attenuation: >90dB @ 90-300 MHz. Insertion loss: <0.5dB @ 30MHz. 50Ω, rated 1 KW PEP. 9.6" w x 2" h x 1.5" d, 1.2 lbs..... **\$64.99**

MFJ ENTERPRISES, INC.



1270C TAPR TNC-2 Clone Interfaces computer with RS-232 serial port and terminal program for VHF/UHF, OSCAR and non-FM packet. Switchable HF/VHF modems. EasyMail™ personal mailbox, WeFAX. KISS interface for TCP/IP, 256K EPROM and 32K RAM. AX.25/Level 2-V2 software. Comes with interface cable, serial port connector and AC adapter. 12 VDC. 9.5" x 7.5" x 1.5"..... **\$159.99**



1278B Multi-mode Data Controller 10 modes: PACTOR, 16-level FAX, color, SSTV, PACKET, AMTOR, RTTY, ASCII, CW Navtex & memory keyer. Enhanced mailbox • 32K RAM • 16-gray level modem • 20 LED tune indicator • MARS mode • Internal modem header • 10 program message buffers • Dual radio ports • KISS interface • Host mode • Threshold control • RS-232/TTL ports • 12 VDC • 9.5" w x 9.5" d x 1.5" h..... **\$279.99**

1278B/DSP The 1278B w/DSP filter.... **\$359.99**



1272 TNC Switch Pushbutton selection for voice or digital. You specify the radio and TNC connection. Multiple models available(ea.) **\$39.99**



1273B Sound Card Interface A basic plug-and-play interface for the digital modes. Has jacks for sound card, radio, speaker and RS-232 (no mic jack or switch). Includes RS-232, audio and mic cables and software. No external power needed. **1273B** for 8-pin round mic plug, **1273BM** for 8-pin modular (RJ-45) mic plug ea. **\$59.99**



8621 2M Packet Data Radio High performance thru 9600 baud. Plug in TNC cable, your antenna and power – you're ready for packet. Crystal control on 145.01MHz, 5W output. Requires 12 VDC @ 1A. 5" w x 5.5" d x 1.5" h **\$139.99**

8621X2 Dedicated VHF Data Radio for APRS Automatic Packet Reporting System transceiver. Ready to go on 144.39MHz **\$149.99**



1275/1275M Sound Card-to-Rig Interface Connect between a transceiver and computer and enjoy all digital modes without additional equipment. Operate PSK-31, packet, APRS, AMTOR, RTTY, SSTV, CW, HSCW meteor scatter, contest voice keying, contest memory keyer, etc. Internal jumpers program mic wiring for any radio. Includes audio cables, power plug and a CD with a collection of the most popular amateur radio software to operate the digital modes. Requires 12VDC (110 VAC with optional adapter). **1275** for 8-pin round mic plug or **1275M** for 8-pin modular (RJ-45) .. ea. **\$99.99**



1279 Super Sound Card Interface This super sound card interface has all of the features of the MFJ-1275 plus • Auxiliary input jack, allows switching of a sound card from the 1279 to something else. No more plugging and unplugging! • Direct CW/FSK keying jack, allows direct CW or FSK keying operation • Headphone jack, use stereo headphones, also turns off external speaker • Foot-switch, use a footswitch or other for PTT (push-to-talk) when not using VOX • Play and Pause, includes software, RS-232 and audio cables, AC power supply • **1279** for 8-pin round mic plug, **1279M** for 8-pin modular (RJ-45) mic plug..... ea. **\$129.99**

Palomar Engineers

RFI-4 RF Interference Kit A selection of Ferrite Toroids and Beads to eliminate RFI from 1 to 1000 MHz. Contains: 12 beads with 0.2" holes for small wires and cables, 4 toroid (donut shaped) cores with 1/2" holes, 4 with 3/4" holes and 4 split beads (toroids cut in half so you can put them over cables without disconnecting them). Two of them fit over RG-58 (1/4" hole) and two fit over RG-8 (1/2" hole). Includes a RFI Tip Sheet that explains the use of ferrites in detail and tells how to use them to keep RFI out of computers, stereos, VCRs, alarm systems, and telephones **\$25.99**

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RIGblaster

The easiest way to connect a radio to a PC to operate old or new, analog and digital modes. Over 100 ham radio programs transmit and receive over 20 different modes. Your radio, a RIGblaster, PC, and appropriate software take the place of old expensive adapters, TNC's, digital voice keyers, microphone equalizers, rig control interfaces, DSP receive filters, internet linking interfaces, automatic beacon clocks and more. Use the processing power built in to your PC instead of a old fashioned outboard box that only does a few things. All RIGblasters are fully ground isolated, come with an up to date CD collection of ham radio operating software, all the cables and power supply you need to get on the air. Five models to choose from for your operating needs. Use with any modern computer and radio with a matching mic connector.

RB/PR/C RIGblaster Pro The only complete computer interface! Allows you to use all sound card software, computer control a radio, equalize and record a microphone, operate keyboard FSK and CW and more. Built in rig control interface for most radios. Single serial port rig control and sound card operation. Separate CW and FSK keying outputs. Transmit audio muting. Two mic. switchover. For the ham that wishes to do everything that can be done with computer and a radio. 8-pin and RJ45 radios as supplied..... **\$249.99**

RB/PL/C RIGblaster PLUS Run all sound card modes with fully automatic operation with your mic. No manual switching, no plugging or unplugging. Works with all transmit and receive sound card software. CW or FSK direct keying output. 8-pin and RJ45 radios as supplied..... **\$139.99**

RB/M8/C RIGblaster M8 Run all sound card modes with fully automatic operation using your mic. No manual switching, plugging or unplugging. Works with all transmit and receive sound card software. 8-pin and RJ45 radios as supplied.. **\$109.99**

RB/NO/8C RIGblaster Nomic 8-pin Small and inexpensive. Perfect for portable or temporary setups. No power supply needed. Perfect for an Internet remote link. Unplug your mic, whenever you wish to use sound card software. 8-pin radios as supplied..... **\$59.99**

RB/NO/RJC RJ-45 Nomic RIGblaster Same as above with RJ45 connector **\$59.99**

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Kantronics



MULTI-MODE DATA CONTROLLERS

KPC-3 Plus/128 1200 bps • Packet, GPS/APRS, Host, KISS and WEFAX modes, use with EMWIN • Personal Mailbox (PBS) now supports multiple calls • Remote access, sensing and control with two A/D and two control lines • PBS 100k, expandable with optional 512k RAM..... **\$186.99**

9612 Plus/128 1200 port and second port of 4800-38,400 bps • Most modes/capabilities of the KPC-3 Plus and POCSAG (paging) • Unique design allows the addition of another port, high or low speed • Remote access, sensing and control capability • Telemetry transmission capability... **\$349.99**

KAM 98 Single port multimode TNC for HF and VHF use • Packet, GPS/APRS, Host, KISS, WEFAX, CW, RTTY, AMTOR, PACTOR, G-TOR®, Free signal detection for HF email, A/D inputs/TTL outputs • HC11 for more processing power to accommodate future upgrades • Wider range of speeds; use 1200 bps packet on 10 meters **\$399.99**



KAM XL Multi-Mode DSP Controller Kantronics third generation multimode TNC, a state-of-the-art design giving operations on HF, VHF, and UHF, while supporting DSP modems and popular new modes of operation • Packet 300/1200bps • G-TOR • Pactor I • AMTOR ARQ (FEC, SELFEC, CCIR 476 and 625) • PSK31 • RTTY • NAVTEX/AMTEX • ASCII • WEFAX • CW • Dual-port mailbox • Remote SYSOP access • GPS NMEA-0183 compatible • Kantronics Host Mode • KISS..... **\$399.99**

HAL COMMUNICATIONS CORP.

RTTY-1 Tuning Indicator EZ to use, very accurate. works with any FSK radio modem. Crossed LED bars show correct tuning for FSK modes including Baudot Teletype (RTTY), ASCII Teletype, AMTOR, SITOR, P-Mode, HF Packet. Filters: 2125 Hz (Mark), 2295 Hz (Space) 5.5" w x 3.75" h x 1.25" d, 0.5 lb. Requires +9V-18V DC @ 160 ma **\$99.99**



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TIMEWAVE TECHNOLOGY INC.



PK-232/PSK Multimode Data Controller The most popular data controller ever built, now with a sound card interface. Offering a new level of performance with accurate Digital Signal Processing filters for internal data modes and dual transformer isolation for sound card data modes. • 18 DSP filters, twin peak RTTY filters, 100HZ CW filter and adaptive PACTOR filters. Weak signals magically appear through noise and interference bounces off the filters for cleaner copy than old analog filters. Supports new sound card modes in addition to existing PK-232 modes. Comes with a complete cable and connector set, in addition to Timewave's on-line and telephone support. Requires 11-16V DC @ 800 ma. 8.25" d x 2.5" h, 3 lbs **\$531.99**



PK-96/100K 9600/1200 packet TNC 9600 and 1200bps packet-ready • GPS firmware standard • Remotely program • GPS commands • Stand-alone tracking hardware HDLC for accuracy • True DCD to hear weak signals • Gateway as a node • Full MailDrop facility • PC PackRatt Lite™ terminal control and APRS™ software included • AEA host mode • Advanced command set • Identify TCP/IP, TheNet and NetRom • Separate external TX for 9600/1200bps adjustments • External reset • Windows™ and Macintosh™ programs available • Requires 12V DC • 6.25" w x 7.5" d x 1.375" h, 1.25 lbs. 128K RAM **\$219.99**

AC-5 120V Power Supply Provides 13.8VDC @ 1.7A for the DSP-599zx, PK-232/DSP, DSP-2232, DSP-1232, DSP-232, PK-900 or other low consumption accessory. Desktop, has 6 ft. long input and output cords so the unit does not take up any wall socket or power strip space..... **\$24.99**



Host terminal Software – Takes advantage of true multitasking capabilities of Windows 95, 98, ME, NT and 2000. Release 1.5 with PSK-31 support.

PacTerm 98 For Kantronics™ TNCs **\$79.99**
PK-Term 99 For Timewave and AEA (PK-12/96/232) TNCs. Support for PK-232/PSK..... **\$79.99**

105C 24 Hour Quartz Wall Clock Black, 10" diameter face, sweep second hand. Uses one "AA" battery..... **\$19.99**



Small 24-Hour Clocks A dual clock with separate UTC and local time display modules, and a single clock with 24 hour time only. Heavy brushed aluminum frame, 5/8" high LCD numerals, sloped face. Flashing seconds clock, battery included.

107B (left) Single, 2.25" w x 1" h x 2"d..... **\$9.99**

108B (right) Dual, 4.25" w x 1" h x 2"d..... **\$19.99**



112B DX'er's World Map Clock Shows time at any QTH throughout the world on an attractive LCD world map. Also shows day, month, date and year. Choose 12 or 24 hour. Daylight saving time feature. Grey, cool bile backlight for night viewing 4.25" w x 3.3" h x 2.25"d..... **\$24.99**



113 12/24 Hour Desk Clock Switchable 12/24 hour display • 9-minute ID timer • Alarm function • 9V battery back-up for power failures • 110 VAC, 60Hz • 9" w x 4" h x 2.5"d..... **\$19.99**

115 WORLD Map 24 hour Quartz Wall Clock Set it to GMT and you'll know what time it is in designated areas of the world any time of day. Premier cities outline the trim of the 12" diameter. Operates on "AA" battery (not included) .. **\$24.99**



116DC 12 VDC, 12 Hour LCD Travel Alarm Clock Great for motor homes and trucks! Green 5/8" LED digits show 12 hour time

format. Ten minute ID buzz, two-level alarm (100dB - high) low/high @ 110dB) 9V back-up battery. Power cord with cigarette lighter adapter attached. Compact, 4.5" w x 2" h x 4" d, 17 oz. **Closeout \$9.99**



118 Jumbo LCD™ 24 or 12-hour clock 1.25" high with high contrast LCD. Shows year, month, date and day in four different languages. Includes 100 year calendar and flip stand. Uses one "AAA" batt. (not incl.). 5.75" h x 3.375" w x 0.5" d **\$24.99**

123 Eternity Atomic Clock™ Solar powered and automatic time set by radio signals received from WWVB. Large (6.75" w x 2" h) LCD display, selectable 12/24 hour time format, digital calendar. Ordinary room light powers the solar cells and also replenishes a built-in rechargeable battery; also uses (2) "AAA" batteries (not included) for back-up power. Metallic tan, 9" w x 3.5" h.. **\$79.99**



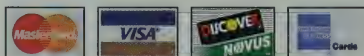
125 DX'er's Dream 24-hour Quartz Wall Clock 12" diameter face shows 24 hour format with smaller day, date and 12 hour indicators. All dials set independently as desired. Uses a single "AA" battery (not included)..... **\$29.99**

Benjamin Michael Industries
INC.

973A Battery operated 24-hour quartz controlled clock with sweep-second hand. 12" dial allows excellent visibility. Black textured case and glass crystal. Uses AA battery (not incl.). 14" dia. x 1.75" d.. **\$49.99**



972AD 14" dia., 12/24 hr. wall clock, sweep-second hand. Uses "AA" battery (not included) **\$27.99**



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INTERCONNECTS

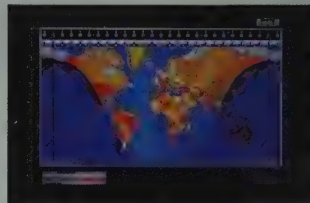
Fully automatic interface between an FM base radio and phone line to initiate and receive phone calls on a mobile or HT. Each contains powerful, micro-processor-controlled features such as 90 memory speed dialer, redial, built-in programming keyboard and digital readout, remote base mode, regenerated tone or pulse dialout, CW ID and toll restrict.



CS-800 Full Duplex Interconnect Operates full or semi-duplex and also has a built-in repeater controller. Simply connects to transceiver mic and speaker jacks. FCC and DOC approved. 12-15 VDC. 7.875" w x 7.5" d x 2" h, 2.5 lbs..... **\$369.99**

CS-900 Control Station Simplex Interconnect For use with any simplex transceiver. Also use thru remotely located repeaters (from base) for added range. Digital voice delay standard. Connects to mic and speaker jacks of simplex transceiver. FCC and DOC approved. Looks like CS-800. (Transceiver switching speed does not affect performance) 12-15VDC 7.9" w x 7.5" d x 2" h, 2.5 lbs..... **\$369.99**

GEOCHRON
ENTERPRISES INC.



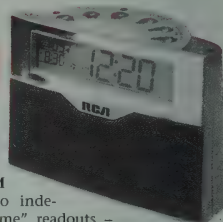
STD BLK/GOLD or STD OAK/GOLD A framed, lighted world map which is a continuous belt of mylar film in constant motion synchronized with Earth's orbit. Displays current time world-wide, sunrise/set, and current season everywhere via an illuminated pattern • Allows for calculation of time in non-standard zones • Shortwave radio prefixes • Standard model in black or oak with gold trim • 3' x 2', wall mounting ... **Drop Shipped \$999.99**

Available by Special Order in numerous trims/finishes, and in 3 other models (with analog 0-60 min. scale).

RCA

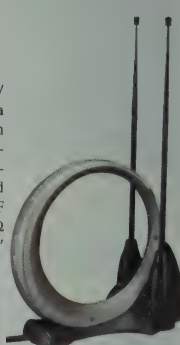
CLOCK

RP-3710 Dual Wake Digital Tuning AM/FM Clock Radio Two independent "wake time" readouts – display indicates both time settings • Gradual "wake" ramp-up alarm • Snooze • Large, backlit LCD with brightness control • 11 presets – mix AM/FM stations plus your choice of 1 preset wake station. Sleep to one station, wake up to another • 9V back-up battery (not included) holds time and alarm settings in memory for 8 hours • Operates on 2 AAs, included • 5.25" w x 4" h x 3.75" d..... **\$24.99**



AUDIO/VIDEO

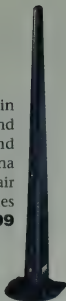
ANT-1020 VHF/UHF/FM Indoor TV Antenna Contemporary design with no-scaff pad to protect cabinet tops. • 39-inch retractable and adjustable dipoles • UHF loop • Integrated 75Ω hook-up cable with "F" connector..... **\$19.99**



TA-25 Eagle Aspen™ TV Distribution Amplifier Excellent for home and small MATV systems! UHF, VHF, FM • 54-890MHz • Low noise, typ. 6-7dB • 25dB gain • Switchable FM trap • Lightning protection • 6" w x 3" h x 1.75" d • 117 VAC, 4.5W **\$19.99**

TERK**STEREO ANTENNAS**

TOWER AM-FM Tower Antenna Built-in amplifier with gain control improves AM and FM reception. Works with tuners and receivers with 75Ω or 300Ω FM antenna inputs. The AM connection consists of a pair of wires with U-clips. Useful 30-40 miles from broadcast transmitter..... **\$24.99**



ADVANTAGE External AM Antenna Passive, adjustable 530-1600kHz AM antenna that improves reception over built-in loops. Used unattached, next to the radio. Position for best reception, then rotate tuning dial located at the center of the antenna to match the AM frequency tuned in on the radio. For best performance, connect directly to an external AM antenna input..... **\$49.99**



PI-B Powered Indoor AM/FM Antenna Improves FM (88-108MHz) performance by eliminating multipath interference and providing amplification from the built-in low-noise preamplifier with gain control. An adjustable position AM loop provides great broadcast band reception. FM output impedance: 75Ω (300Ω with supplied matching transformer), AM: 300Ω. 6" h x 6" w x 1.5" d. AC power adapter included..... **\$49.99**

**TV ANTENNAS**

TV-42 Amplified Clip-On Antenna Attaches quickly to any 18" satellite dish and adds reception of all local VHF/UHF channels. Covers channels 2-83 and FM broadcast. Built-in internal 10dB gain amplifier to minimize signal loss, allowing distribution to multiple TV's. For Dual-LNB dishes, it has two built-in diplexers, providing more than one TV with DSS and VHF/UHF signals. Powered thru the cable by a DSS receiver. Durable, powder-coated element and weather-proof amplifier housing. 10.25" h x 21.25" w x 3.5" d..... **\$49.99**



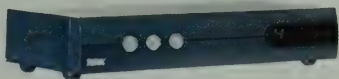
TV-55 Amplified Out/Indoor TV Antenna Uses a helical, coiled broadband single element engineered for clear, powerful reception of HDTV broadcasts. Receives both UHF and VHF frequencies from 54-806MHz. Built-in ultra-low noise 10dB amplifier can be switched in or out for best reception. Mounts in or outdoors. Includes a 12V adapter and mounting hardware. 46" w x 3.5" h x 2.25" d..... **\$89.99**



HDTV-1 Indoor UHF/VHF/HDTV Antenna Unique design utilizing long periodic-tuned elements and dipoles for receiving both UHF and VHF HDTV broadcasts, allowing reception of more stations. Tuned for optimum reception - high front-to-back ratio eliminates reflected signals and high gain picks up distant signals. 13.5" w x 9.1" h x 16.5" d. 42" high with dipoles (rabbit ears) extended... **\$29.99**

**TV, A/V ACCESSORIES**

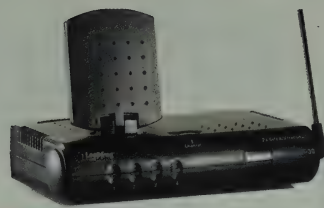
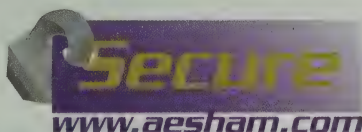
MOD-41 RF Modulator Connect up to four A/V sources to any TV with no available A/V input jacks. Similar to VS-MOD4 below, without S-Video jacks or IR remote control. 6.5" w x 2" h x 4.25" d **\$39.99**



VS4-MOD RF Modulator-Plus Allows connections of multiple A/V components to a TV with no available A/V (RCA) input jacks. Provides inputs for up to four A/V sources (video games, DVDs, PVRs, VCRs, satellite receivers and camcorders). Converts A/V sources to VHF for viewing on channel 3 or 4 on any TV. Compatible with your IR remote control to remotely switch between A/V sources. Has "F-type" antenna/cable inputs and RCA/S-Video input/output jacks. 9.75" w x 2" h x 5" d. AC wall adapter included..... **\$49.99**

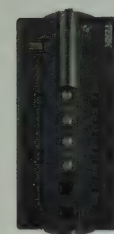


VR-1 TV Volume Regulator Delivers a consistent audio level during commercial breaks, while channel surfing or changing between A/V sources. Advanced DSP automatically adjusts sound levels while noise reduction reduces any 'hiss' present in audio and articulates quiet scenes to a level that you can enjoy. Simple plug and play, one time installation. 3.18" w x 3.87" h x 1.43" d..... **\$49.99**

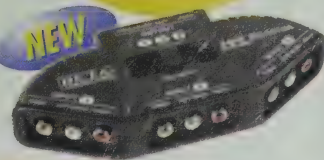


LF-30S Leapfrog WaveMaster 30 Transmitter/Receiver System An easy-to-use, cost effective alternative to purchasing multiple A/V components. Allows remote control use of A/V signals from one source, such as a TV with satellite or DVD player, to another within your home. Transmits a 2.4GHz band and penetrates walls, doors, ceilings and floors. Built-in IR extender enables use of existing or universal remote to control the system. Built-in modulator ensures connection to old and new TV's. 1.5" h x 7" w x 4.8" d..... **\$99.99**

LF-IRX Leap Frog Remote Control Range Extender Increase capability of infrared remote controls. Provides the power to operate A/V components through walls and floors up to 100'. Operates on 418 MHz for wireless install. Simply plug base in near controllable unit, then plug the receiver in remote location. Cables and AC adapters included. 5" h x 2.5" w x 4" d ea..... **\$39.99**



TSP-6 Surge Protector Protects satellite, antenna, cable, and phone lines from surge and spike damage while providing constant EMI/RFI noise filtering for 8 AC outlets. Automatically shuts off if protection fails. • Resettable circuit breaker • Surge and ground protection LEDs • 6' power cord with slim-line plug, 6' TV/satellite and phone cables • Rated 125V @ 15 amps..... **\$29.99**

Look For This**NEW****& Check Out AES' Latest Additions.****NEW****VELLEMAN**

AVW-089 3-Channel Audio/Video Switcher Accepts audio (left/right) and video input from three sources switchable to a single output.. **\$8.99**



The Performance Antenna

We Make it Simple ... But GOOD!

Most mobile antenna installations are notoriously inefficient and complex to install. Some are so big and cumbersome, they need guy ropes and special mounts to handle the wind load when under way. Some are single band only, others need a bag full of resonators for multi-band operation. Whips with automatic tuners or "screwdriver" types are nice, but even more cumbersome to install, usually requiring extra wiring and a controller.

The OUTbacker eliminates these "big antenna" problems while providing efficient, multi-band performance in a rugged, lightweight, single whip design. Its sleek, low profile design allows use with standard 3/8-24 bases and trunk-lip mounts.

Fiberglass shaft construction, using a pre-tuned copper helical winding with clearly marked brass band taps at points along its length. A final coating of smooth epoxy resin and polyurethane, gives the OUTbacker a toughness and durability not found in other brands, while making a really good looking mobile installation.

Changing bands is a snap; simply plug into the desired band tap and resume operating without changing whips, resonators, or retuning.

MODEL	BANDS	POWER	LENGTH	PRICE
OB-8	75-10M + WARC	300W P.E.P.	6 ft.	\$319.99
OB-8HP (HIGH POWER)	75-10M + WARC	500W P.E.P.	6 ft.	\$329.99
OB-S8*	75-10M + WARC	300W P.E.P.	6 ft.	\$329.99

*Breaks down into two 3 ft. sections, includes a cloth carrying pouch

OB-8TRI Same as OB-S8 except it breaks down into three 2 ft. sections, pouch included **\$339.99**

PERTH* 75-10M + WARC 150W P.E.P. 7.5 ft. **\$329.99**

*The Most Efficient model for HF Mobile

PERTH PLUS* 75-10 + 6/2M + WARC 150W P.E.P. 6 ft. **\$329.99**

*Perfect for HF Radios with added 6 & 2 meter capability

STEALTH PLUS* 75-10 + 6/2M + WARC 100W P.E.P. 4 ft. **\$319.99**

*Perfect for HF Radios with added 6 & 2 meter capability

OUTREACH* 160-10M + WARC 300W P.E.P. 12 ft. **\$419.99**

OUTREACH 500* 80-6M + WARC 600W P.E.P. 12 ft. **\$449.99**

*OUTREACH and OUTREACH 500 perfect for use with the OUTPOST, below

OB-M* Marine/HAM* 300W P.E.P. 6 ft. **\$449.99**

*Marine: 2.182, 4.1, 6.2, 8.2, 12.4, 16.5, 22 MHz • HAM: 75, 40, 20, 17, 10M

Joey* 80-2M + WARC 20W P.E.P. 50 in..... **\$299.99**

*Improves portable performance of FT-817 and other QRP rigs.

ALP MicroMount Desktop tripod for Joey, 8 in. tall with 12 ft. counterpoise **\$49.99**



OUTPOST Base Tripod Mount for using mobile antennas in base portable applications. Improved efficiency due to better ground coupling. Pictured with OUTbacker antenna installed (described below). Tripod only, antenna is not included..... **\$199.99**

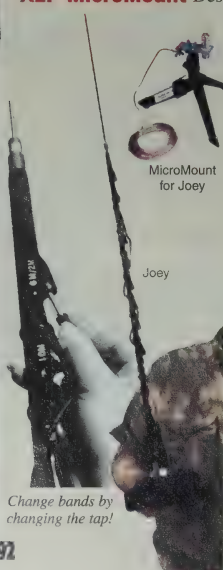
The OUTbacker/Outpost Tripod Antenna System

The Ideal Condo, Limited Space Antenna System Providing Incredible DX Performance!

- A convenient method of utilizing OUTBACKERS for Base/Portable operation.
- The OUTbacker **Outreach** (12 ft. tall, 160-10 meters, 300 watts PEP) or the **Outreach 500** (12 ft. tall, 80-6 meters, 600 watts PEP) and the matching Alpha Delta Outpost ground coupler tripod comprise the system.
- Virtually unseen by your neighbors but provides efficient, world class "fixed station" performance.
- Users report multi-band DXCC and WAZ results. On-site comparisons with several large commercial "no radial" trap verticals (your neighbors can see those) have shown that the OUTbacker/Outpost combination works the same or better in most cases. High efficiency comes from careful design with center and 5/8-wave loading over a 12 ft. length and effective use of exclusive band taps. No control wires or motors are required as in some other designs.
- Adding to the efficiency of the system is the "ground coupling" of the Outpost tripod. Its precision designed 36 in. long x 3 in. wide "platypus" ground feet on each leg form a large capacitor with the earth, providing spectacular efficiency and coupling.
- No radials, cement mounting or tools are required. Just unfold and go! No other base provides such a level of ground coupling or ease of use. Install on patios OR in yards. Even the shorter OUTbacker models perform well on the Outpost.
- Compact, fold-up design sets up quickly and collapses in seconds; no holes, no concrete!
- A mobile-type mount on top accepts a standard 3/8-24 antenna stud and PL-259 connector.
- A fold-over top bracket, allows the antenna to be easily removed or folded down for changing bands, or to be out of view.
- Rugged 6061-T6 aircraft aluminum members, 18 lbs. Stainless steel hardware and wing nuts, comes all assembled.



Joey



Change bands by changing the tap!

Effective Atmospheric Surge Voltage Protection!

Dangerous static charges measuring 1000s of volts can be developed from local thunderstorms, high wind driven snow or sand; so potent they can actually puncture the dielectric of coaxial cable. Solid-state transceivers and other equipment in your hamshack are very vulnerable to these high-voltage charges so you should take every precaution to protect your equipment and shack from possible serious damage... and ALPHA DELTA has the answer!

Special Arc-Plugs are used in ALPHA DELTA's Coax Switches, Surge Protectors and DELTA-C Center Insulator which "bleed off" slow rising static electricity charges from the feed line, routing them harmlessly to ground. This is far more effective than DC grounded baluns or chokes. But, even as effective as these devices are, you still need to pay attention to proper grounding procedures as outlined in the ARRL Handbook and other technical publications.



Lightning Surge/EMI Protectors

UL LISTED – Certified protection for your equipment from lightning and static charges much more effective than low-cost air-gap types.

The heart of this protector is an easily replaceable Arc-Plug™ – two electrodes hermetically sealed in a gas filled ceramic cylinder. Acting like a voltage dependent switch, the Arc-Plug™ can repeatedly carry large currents to ground for brief periods.

If you are running control voltages through the coax, the impedance compensated thru-line cavity design allows it to pass thru, instead of having to "wire around" as with some other DC-blocked designs.

Wide Frequency Range: DC thru 3 GHz, much wider than narrow band DC blocked or stub designs.
Low Insertion Loss: 0.1dB @ 1 GHz, 0.2dB @ 2 GHz, and only 0.5dB @ 3GHz, typical.

ATT-3G50* has Type-N females connectors, rated up to 3.0 GHz and 200 Watts **\$59.99**

ATT-3G50U* has UHF female connectors, rated up to 500MHz and 200 Watts..... **\$49.99**

*2000 Watt version available at No Extra Cost – specify ATT-3G50HP or ATT-3G50UHP

KENT Keys by ALPHA DELTA



Produced by R.A. Kent Engineers, for Alpha Delta. Rugged, machined and polished solid brass components. Delicate, smooth feel and free movement with minimum friction and side play. Silver contacts with precise gap alignments are easily adjusted with knurled heads on fine pitched screws. Non-slip feet, and weighted for stability.

SK-1 Straight Morse Key **\$129.99**
SP-1 Single Paddle Morse Key **\$139.99**
TP-1 Twin Iambic Morse Paddle..... **\$149.99**
VK-1 The "Vail Lever Correspondent" Key A faithful reproduction, accurate to the type of hardware used during the mid-1800s, of the first full mechanism telegraph hand key made for Samuel F.B. Morse by Alfred Vail in 1844. Hand crafted and serialized – a collectable!... **\$198.99**

Lightning Surge Protected Coaxial Switches



- High Quality custom design featuring a rugged Cast Aluminum Housing.
- Constant impedance micro-strip cavities that provide very low-loss and high isolation through the UHF frequencies.
- Solid, positive switching
- Rated for Full Legal power.
- A solid positive detent roller bearing switch snaps positively into each position.
- An Alpha Delta Arc-Plug™ Cartridge provides continuous surge protection. If needed, it is easily replaced from the front without disassembly.
- Automatic grounding of the unused antennas to reduce antenna interaction, noise and the effects of static charges and lightning.

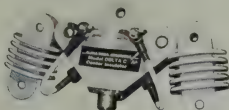
DELTA-2 2-position, with SO-239 connectors and rated for operation up to 500MHz **\$49.99**

DELTA-2/N 2-position, with N-type connectors, rated for operation up to 1.3GHz..... **\$64.99**

DELTA-4 4-position, with SO-239 connectors, rated for operation up to 500MHz **\$79.99**

DELTA-4/N 4-position, with N-type connectors, rated for operation up to 1.3GHz **\$89.99**

Antenna Insulator Kit with Surge Protection



DELTA-C A center insulator and two end insulators. Use for dipoles and wire antenna using either coaxial cable or balanced feed line. Rugged – highest quality, made from a virtually unbreakable UV/RF resistant material. Rated to handle full legal power. Stainless steel hardware is used in the center insulator, and all connections are hard soldered. An easily replaceable built-in Arc-Plug® in the center insulator provides surge protection from lightning and static charges **\$29.99**
DELTA-CIN End Insulator only ea. **\$1.99**
SEP Replacement Arc-Plug® cartridge..... **\$15.99**

Limited Space Slopers



- Proven 1/4-wave sloper DX Performance
- Alpha Delta "ISO-RES" inductors replace lossy traps and capacitors, handles Full Legal Power.
- Factory assembled using insulated #12 copper wire, stainless hardware and 50 ft. of nylon rope.
- Direct 50Ω coaxial feed, no tuner required. Go to www.alphadeltacom.com for sloper installation.

DX-A A top performing 1/4-wave Twin Sloper 160, 80 and 40 meter DX antenna. Combines the DX fire-power of the 1/4-wave sloper with the wide bandwidth of a 1/2-wave dipole. Installs like an Inverted-V. Legs are 67 ft. and 55 ft. long **\$59.99**

DX-B A single wire high performance 1/4-wave DX Sloper with for 160, 80, 40 and 30 meters. Installs like 1/2 of an Inverted V. Convenient limited space installation requires only 60 ft. of space for amazing DX performance with the feed-end at 35 ft. and the low end only 8 ft. above ground ... **\$69.99**

Shortened Multibanders



- Alpha Delta "ISO-RES" inductors replace lossy traps and capacitors, rated Full Power.
- Direct 50Ω coaxial feed, no tuner required except for extended frequency coverage.
- Factory assembled with insulated #12 copper wire, stainless hardware and 50 ft. of nylon rope.
- Uses a DELTA-C Static Protected center insulator and DELTA-CIN end insulators.
- Install Horizontally as an Inverted-V.

DX-CC 80-40-20-15-10M, 82 ft. long..... **\$119.99**

DX-DD 80-40M, 82 ft. long **\$89.99**

DX-EE 40-20-15-10M plus 30-17-12M using a wide range antenna tuner, 40 ft. long **\$99.99**

DX-LB 160-80-40M, 100 ft. long. Typical bandwidth for 2:1 VSWR: 160M (20kHz), 80M (40kHz), 40M (300kHz). Full band coverage using a wide range antenna tuner **\$119.99**

DX-LB PLUS Same as DX-LB above, but adds 20-10M with parallel wires **\$149.99**

Full-Size Monoband Dipoles



- 50Ω coax feed, no traps, handles Full Power
- Install Horizontally or as an Inverted V
- Rugged, full-size performance
- Factory assembled with #12 insulated copper wire, DELTA-C static protected center insulator, DELTA-CIN end insulators and includes 50 ft of nylon support rope.

DX-80 75/80 meters, 134 ft. long **\$49.99**

DX-40 40 meters, 67 ft. long **\$39.99**

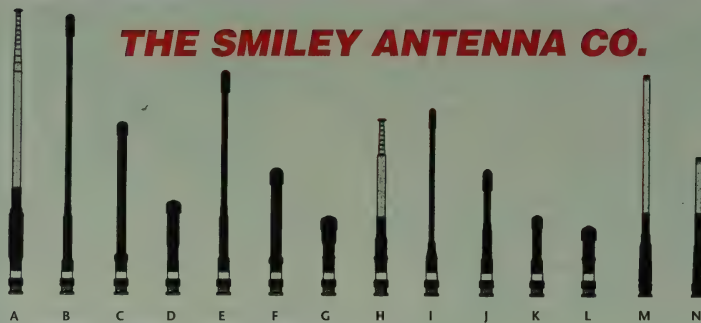
DX-20 20 meters, 34 ft. long **\$39.99**

ALPHA DELTA COMMUNICATIONS, INC.

www.alphadeltacom.com



THE SMILEY ANTENNA CO.



HAND TUNED ANTENNAS FOR HANDHELD RADIOS

Each Smiley antenna is individually tuned to resonance at band center under normal operating conditions (no ground plane, no radials). They're manufactured from the finest heat-treated copper plated spring steel coils. Cold rubber compound is used for coil insulation with a neoprene heat-shrink coating applied for strength and endurance. All have BNC connectors.

TS Thin Stick 1/4-wave telescoping dual band antenna for 144 and 220MHz bands **\$16.99**

SS-II Super Stick II (A) 2M, 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain fully extended. Usable fully collapsed, or one section 1/4 wave. 54" extended, 10" collapsed..... **\$19.99**

SS-II/COMBO Super Stick II Combo Same as above, but includes a 2m stubby duck..... **\$26.99**

5/8 SLD-2 5/8 Slim Duck (B) 2m, 5/8-wave, 7db gain, flexible base loaded ant. 12" long **\$17.99**

5/8 SLD-2 COMBO 5/8 Slim Duck Combo As above, but includes a 2m stubby duck..... **\$24.99**

RD-2 Regular Duck (C) For 2m. Tuned ducks show a 3db gain over other rubber ducks because they are impedance matched for HTs..... **\$14.99**

RDS-2 Stubby Duck (D) Tuned, for 2m. **\$14.99**

SS-III Super Stick III 220MHz 5/8-wave, flexible base loaded telescoping antenna. 6-9db gain extended; usable collapsed, or a one-section 1/4-wave. 36" extended, 8 3/4" collapsed..... **\$19.99**

SS-III/COMBO Super Stick III/Combo As above, but incl. a 220MHz stubby duck **\$26.99**

5/8 SLD-220 5/8 Slim Duck (E) 220MHz, 7db gain, flexible base loaded 9" antenna..... **\$17.99**

5/8 SLD-220 COM 5/8 Slim Duck Combo Same as above, but includes a 220MHz stubby duck antenna **\$24.99**

RD-220 Reg. Duck (F) 220MHz, tuned... **\$14.99**

RDS-220 Stubby Duck (G) As above..... **\$14.99**

SS-IV Super Stick IV (H) 440MHz 5/8-wave, flexible telescoping ant. 6-9db gain extended; usable collapsed. 18" extended, 5 3/4" collapsed..... **\$19.99**

SS-IV/COMBO Super Stick IV Combo Same as above, plus has 440MHz stubby duck **\$26.99**

SL-440 Slimline (I) 440MHz, 3/4-wv. flex. **\$12.99**

5/8 SLD-440 5/8 Slim Duck (J) 440MHz, 7db gain, flexible base loaded 5" antenna..... **\$17.99**

5/8 SLD-440 COM 5/8 Slim Duck Combo As above, plus has a 440MHz stubby **\$24.99**

RDS-440 Stubby (K) 440MHz, tuned..... **\$14.99**

RDMD-440 Mini Duck (L) As above **\$14.99**

FLX 1/2 WAV-2M Flex-Coil (M) 2M, 1/2-wave, 7-9db gain, flexible base, 35" fully extended **\$25.99**

270A (N) Telescoping 2m/440 gain antenna. 1/4-wave (2m) 5/8-wave (440MHz). The 270A is also available with SMA **\$19.99**

TAQ 1/4-wave whip antenna, specify for 2M, 220 or 440MHzeach **\$10.99**

PREMIER communications



RD-78 RD-8 RD-98 RD-9 AL-800

HANDHELD ANTENNAS

RD-2 Short Duck Antenna (not pictured) Perfect fit for the new micro-sized handhelds such as the VX-1R, VX-SR, IC-Q7A, etc. Only 2" tall, but gives big performance. Operates on both 2M and 440MHz and also works great for out of band scanning. BNC connector..... **\$14.99**

RD-2SMA Same as RD-2, SMA connector **\$15.99**

RD-78 Extended Duck Antenna 15" tall, provides an improvement over stock, steel, spring-type antennas. Hit local repeaters solidly, access distant machines, talk extended simplex. Has 2.5dbi gain on VHF, 3.2dbi on UHF. Also includes 800/900MHz receive capability. Flexible, but doesn't droop. Gold-plated BNC connector **\$19.99**

RD-8 Duck Antenna 6.5" tall and very flexible. Improves your signal over any manufacturer's stock duck. The perfect companion to any 2M/440MHz handheld, including those with 800/900MHz receive. Gold-plated BNC connector **\$14.99**

RD-98 Thin Whip Antenna A 2M/440MHz HT antenna that is 17" long with a diameter of only 1/16th of an inch. Made of extremely strong and very flexible material - ties in a knot without damage! BNC connector **\$24.99**

RD-98SMA Same as RD-98, SMA conn... **\$27.99**

RD-9 Flexible Duck Antenna An extremely flexible 7" tall rubber duck that will improve handheld performance on both 2M and 440MHz. While providing 800/900MHz receive capability. Connector is protected by a moisture shield and is molded to sit firmly on the connector, preventing excessive wear and tear. BNC connector **\$18.99**

RD-9SMA Same as RD-9, SMA conn..... **\$20.99**

AL-800 Telescoping Antenna Useful whenever you need extra performance for satellite work, or when on the fringes of a repeater. Telescopes to 34" or collapses to 10". Has 3.2dbi gain on VHF, 5.5dbi on UHF. For convenience and/or shorter range operation, the telescoping section unscrews and may be replaced with the included 9" rat tail. Gold-plated BNC connector..... **\$29.99**



Arrow Antenna

146/437-10 KKSYY, pictured at the left, working V66EGN on the AO27 satellite using a Yaesu VX-1R, with 500mW output, connected to an Arrow 146/437-10. The Arrow is designed specifically to allow portable satellite operation using just an HT. This means it's engineered to provide maximum gain and efficiency within a small size and weight. The boom construction is 3/4" square aluminum stock, 37.5" long with a foam grip on the back end for comfort. The three VHF and seven UHF Gamma matched elements with separate BNC connectors are aluminum arrow shafts which are strong and lightweight, and plastic tipped for safety..... **\$73**

146/437-10BP Split boom model..... **\$79**

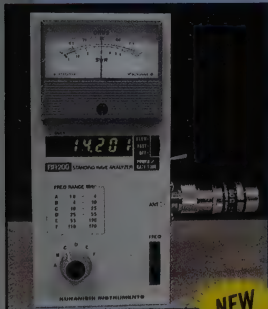


We accept I.M.P.A.C.® Government Credit Cards

Used & Demo
Equipment lists

Updated regularly on the web.
Check them out and order **On-line**

NEW from Kuranishi Instruments LTD, Japan
BR-200 Professional-Grade SWR/Antenna Analyzer



Perform SWR and impedance measurements with confidence! The BR-200 is a laboratory grade precision test instrument providing a wide-band RF signal source for analyzing antenna systems and other equipment without the need for a separate transmitter. • 1.8-170MHz • High precision meter • 500mW 50 Ohm dummy load included • Impedance measurements: 12.5 - 300 Ohm • Connector: SO-239

NEW

COMET & Maldol Dualband and Multiband Base Antennas



**Wi-Fi/802.11b/LAN/HSSM
 Access Point Antennas**

COMET GP-15 • Tri-band 52/146/446MHz Base Repeater Antenna
 • Gain & Wave: 52MHz 3.0dBi 5/8 wave • 146MHz 6.2dBi 5/8 wave x 2 • 446MHz 8.5dBi 5/8 wave x 4 • Max Pwr: 150W • Length: 7'11" • Weight: 3lbs. 1oz. • Conn: Gold-plated SO-239
 • 2MHz band-width after tuning (6M) • Construction: Single-piece fiberglass

COMET CX-333 • Tri-band 146/220/446MHz Base Repeater Antenna
 • Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 220MHz 7.8dBi 5/8 wave x 3
 • 446MHz 9.0dBi 5/8 wave x 3 • Max Pwr: 120W • Length: 10'2" • Weight: 3lbs. 1oz.
 • Conn: Gold-plated SO-239 • Construction: Fiberglass, 2 Sections

COMET GP-3 • Dual-band 146/446MHz Base Repeater Antenna
 • Gain & Wave: 146MHz 4.5dBi 5/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Max Pwr: 200W • Length: 5'11" • Weight: 2lbs. 9ozs. • Conn: Gold-plated SO-239 • Construction: Single-piece fiberglass

COMET GP-6 • Dual-band 146/446MHz Base Repeater Antenna
 Gain & Wave: 146MHz 6.5dBi 5/8 wave x 2 • 446MHz 9.0dBi 5/8 wave x 5 • Max Pwr: 200W • Length: 10'2" • Weight: 3lbs. 8ozs. • Conn: Gold-plated SO-239 • Construction: Fiberglass, 2 Sections

NEW

Maldol NEW HUU-8 Ultra-compact 8 band HF/UHF vertical antenna
 80/40/20/15/10/6/2M/70cm Only 1/2 the traditional size and weight of vertical HF antennas, and it includes 2M/70cm! Unique radial system rotates for balcony installations, the radials can all be rotated to one side. • HF and 6M: 1/4 wave-length • Gain: 1.4, 1/2 wave-length, 2.15dBi • Gain 70cm: Two 5/8 waves in phase, 5.5dBi • Impedance: 50 Ohm • Max Power: HF 200W SSB • 6M-70cm: 150W FM • Conn: SO-239 • Height: Only 8'6" • Weight: 5lb. 7ozs.

COMET GP-9/8P-9N • Dual-band 146/446MHz Base Repeater Antenna • BEST SELLER!
 • Gain & Wave: 146MHz 8.5dBi 5/8 wave x 3 • 446MHz 11.9dBi 5/8 wave x 8 • Max Pwr: 200W • Length: 17'4" • Weight: 5lbs. 11ozs. • Conn: GP-9 Gold-plated SO-239 • GP-9N Gold-plated N-type female • Construction: Fiberglass, 3 Sections

COMET GP-24 The standard high gain 2.4GHz access point antenna for maximum range/signal strength • 2400-2500MHz • Gain: 15.4dBi • Length: 5'10" • Weight: 2lbs. 9ozs. • Conn: Gold-plated N-female • Construction: Heavy-duty white fiberglass radome

COMET GP-24-3 The same physical high gain 2.4GHz antenna as the GP-24, but with a 3-degree electrical downtilt to concentrate the signal to the horizon and below

COMET GP-24-S Medium gain access point antenna for applications where maximum distance is not as important as a solid signal around and directly below the antenna. • Gain: 9.9dBi • Length: 3'9" • Weight: 1lb. 14ozs. • Conn: Gold-plated N-female • Construction: Heavy-duty white fiberglass radome



For a complete catalog, call or visit your local dealer. Or, contact NCG Company.
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Driven to Perform, In STYLE!

COMETTM and Maldol Mobile

NEW

Maldol NEW MH-511 • Tri-band 6M/2M/70cm HT Antenna
• Length: 4" • Conn: Male SMA

Maldol MH-510 • Tri-band 6M/2M/70cm HT Antenna
• Gain: 0/0/3.2dBi • Length: 20.75" • Conn: Male SMA

COMET HT-224 • Tri-band 2M/220/70cm HT Antenna
• Gain: 1.3/1.4/1.8dBi • Length: 11.5" • Conn: Male SMA

Maldol MH-610 • Tri-band 2M/220/70cm HT Antenna
• Gain: 0/1.8/3.2dBi • Length: 14" • Conn: Male SMA

NEW

Maldol AX-75 2M/70cm dual-band shown mounted on the Comet **CP-5M** heavy-duty universal lip mount. Several antenna connector versions are available, all with 16 ft. of 2-step coax and terminating in a PL-259 connector. Coax max pwr: HF/130W, VHF/75W, UHF/45W

COMET CP-5M SO-239 conn
COMET CP-5NMO NMO conn
COMET CP-5 3/8-24 3/8 x 24 conn

Maldol NEW EX-510B/EX-510BNMO • Tri-band 6M/2M/70cm with fold-over
• Gain & Wave: 52MHz 1/4 wave 146MHz 2.15dBi 1/2 wave 446MHz 5.5dBi 5/8 wave x 2
VSWR • Length: 37" • Conn: PL-259 or NMO style • Max Power: 50W FM

COMET SB-15 • Tri-band 6M/2M/70cm with fold-over
• Gain & Wave: 52MHz 0dBi 1/4 wave • 146MHz 4.5 dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: PL-259 • Max Pwr: 120W

NEW UHV-4 • Quad-band 10W/6M/2M/70cm with fold-over hinge
• Gain & Wave: 10M & 6M 1/4 wave 2M 2.15dBi 1/2 wave 70cm 5.5dBi 5/8 wave x 2
• Length: 55" • Max Power: 10W 120W SSB 6M/2M/70cm 100W FM • Conn: PL-259

COMET UHV-6 • HF/6M/2M/70cm Mobile Antenna • 80"/20"•17/40/15/10/6/2M/70cm Mobile antenna with fold-over hinge
• Gain & Wave: 2M 2.15dBi 1/2 wave • 70cm 5.5dBi 5/8 wave x 2 • VSWR: HF 1.6:1 or less; 6M-70cm 1.5:1 or less • Length: 44" (min), 78" (max) • Max Pwr: HF 120W SSB 6M 200W SSB/100W FM, 2M/70cm 100W FM • *L-14, optional 20M coil • *L-18 optional 17M coil • *L-3.5 optional 75/80M coil • Features: • 6M/2M/70cm operation is constant. You CHOOSE the HF coils you want to add, up to four stock or optional. One vertical, the rest horizontal. • Easily mounts to standard trunk/door mount in minutes • Economical • Fold-over hinge built in • Select the duplexer or triplexer for your specific radio(s). CF-706A, CF-530, CFX-514N.

COMET UHV-6
Fold-Over Position

NEW

Maldol NEW HMC-6S • 40/20/15/10/6/2/70cm Mobile antenna with fold-over hinge
• Gain & Wave: HF 1/4 wave 2M 2.15dBi 1/2 wave 70cm 5.3dBi 5/8 wave x 2 • VSWR: HF-6M 1.6:1 or less 2M/70cm 1.5:1 or less • Length: 66" • Max Power: HF 120W SSB 6/2/70cm 150W FM
• HMC-70 optional 40M coil

For a complete catalog, call or visit your local dealer. Or, contact NCG Company.
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COMET BNC-24 • Dual-band 2M/70cm HT Antenna
RX range: 100-1200MHz • Gain: 2.15/3.5dBi • Length: 17" • Conn: BNC
Super flexible featherweight whip

COMET SMA-24 • Dual-band 2M/70cm HT Antenna
RX range: 100-1200MHz • Gain: 2.15/3.5dBi • Length: 17" • Conn: SMA
Super flexible featherweight whip

COMET SMA-503 • Dual-band 2M/70cm HT Antenna
RX range: 100-1200MHz • Length: 8.75" Conn: SMA

Maldol MH-Z09 (BNC Conn) • 2M/70cm Dual-band HT Antenna

Maldol MH-Z09SMA (SMA Conn)

Gain & Wave: 0 1/4 wave • Length: 3" Soft flexible rubber

NEW APEX Series

MALDOL'S Newest Mobiles!
Bright Chrome and Brushed
Aluminum Finish!

NEW Maldol AX-50 • Dual-band 2M/70cm
Gain & Wave: 2M 1/4 wave • 70cm 5.0dBi 9/8 wave • Length: 21" • Conn: PL-259 • Max Power: 60W

NEW Maldol AX-75 • Dual-band 2M/70cm w/fold-over
Gain & Wave: 2M 1/2 wave center load 3.2dBi • 70cm 5/8 wave x 2 5.7dBi • Length: 30" • Conn: PL-259 • Max Power: 60W

NEW Maldol AX-95 • Dual-band 2M/70cm w/fold-over
Gain & Wave: 2M 1/2 wave center load 3.3dBi • 70cm 5/8 wave x 2 5.8dBi • Length: 38" • Conn: PL-259 • Max Power: 60W

COMET B-10/B-10NMO • Dual-band 146/446MHz cellular look-a-like
Gain & Wave: 146MHz 0dBi 1/4 wave, 446MHz 2.15dBi 1/2 wave • Length: 12" • Conn: B-10 PL-259/B-10NMO NMO • Max Pwr: 50W

SBB-2/SBB-2NMO • Dual-band 146/446MHz
Gain & Wave: 146MHz 2.15dBi 1/4 wave, 446MHz 3.8dBi 5/8 wave center load • VSWR: 1.5:1 or less • Length: 29"

NEW Maldol EX-107B/EX-107BNMO • Dual-band 146/446MHz
Gain & Wave: 146MHz 2.6dBi 1/2 wave, 446MHz 4.9dBi 5/8 wave x 2 • VSWR: 1.5:1 or less • Length: 29" • Conn: PL-259 or NMO Style • Max Pwr: 100W

COMET SBB-5/SBB-5NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.5dBi 1/2 wave • 446MHz 5.5dBi 5/8 wave x 2 • Length: 39" • Conn: SBB-5 PL-259/SBB-5NMO NMO • Max Pwr: 120W

COMET SBB-7/SBB-7NMO • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 4.5dBi 6/8 wave • 446MHz 7.2dBi 5/8 wave x 3 • Length: 58" • Conn: SBB-7 PL-259/SBB-7NMO NMO • Max Pwr: 70W

NEW COMET NEW C757/C757NMO Challenger Series • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 2.15dBi 1/2 wave, 446MHz 5.5dBi 5/8 wave x 2 • VSWR: 1.5:1 or less • Length: 38" • Conn: PL-259 or NMO Style • Max Pwr: 80W

COMET NEW CP-5M, CP-5NMO, CP-5 3/8-24 Universal mount, CP-5M and coax cable combos. (SO-239, NMO, 3/8-24/PL-259) Heavy-duty, adjustable RS-730 trunk/van/SUV/truck door mount and deluxe cable assembly. 16' 6" length w/18" mini RG-188A/U type coax. Max antenna 70".

COMET NEW C767/C767NMO Challenger Series • Dual-band 146/446MHz w/fold-over
Gain & Wave: 146MHz 3.5dBi 1/2 wave center load, 446MHz 6.0dBi 5/8 wave x 2 center load • VSWR: 1.5:1 or less • Length: 40" • Conn: PL-259 or NMO Style • Max Pwr: 80W

Driven to Perform, In STYLE!

COMET and Maldol Mobile

NEW Challenger Series

COMET'S Newest Mobiles!
Sleek, Super-Flexible,
Dark Chrome Finish



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COMETTM & Maldol

specialists in "No Holes Mobile Mounts!"

CP Series Universal Lip Mounts

Four adjustment planes, four large setscrews holds them securely in place on virtually any lip 1/4" thick or less. Use on trunk lids, van doors, truck doors, hoods etc. 16' 6" of deluxe coax cable including 18" of mini RG-188A/U style for easy entry thru the weather seal without causing wind noise, water leaks and/or wind noise.

Max antenna size: 70" 16 ozs

Max Power: HF 130W VHF 75W UHF 45W



COMET NEW CP-5NMO
Universal lip mount with coax, NMO and PL-259 connectors.

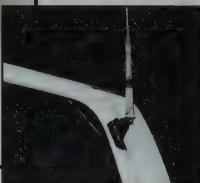


COMET NEW CP-5 3/8-24
Universal lip mount with coax, 3/8x24 threaded stud and PL-259 connectors.

COMET CP-5M Universal lip mount with coax, SO-239 and PL-259 connectors.



Mount: CP5M Antenna: C757



Combine the coax style and length you need with a bracket from below. (assemblies also available with N-connectors)

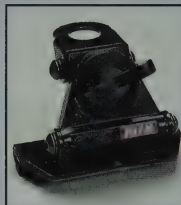


COMET 3D5M/3D4M Standard low loss cable assembly. Gold plated SO-239/PL-259 connectors. 17' length/13.5' length.



COMET CK-3M5/CK-3M Deluxe cable assembly 17' length including 17" of RG-188A/U for easy entry from a lip mount without causing water leak, wind noise or coax damage. CK-3M 9'9" total length.

Choose the bracket that best fits your antenna and vehicle. All have multiple adjustments and fit virtually any lip 1/4" thick or less. Soft rubber protects the vehicle paint.



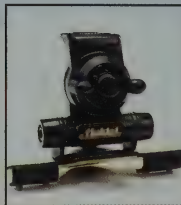
COMET RS-730 Heavy-duty, 4 adjustment planes, up to 70" antenna.



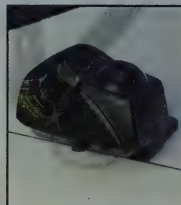
COMET RS-720/RS-720NMO Med-duty, 3 adjustment planes, up to 60" antenna. NMO mount version.



COMET RS-520 Light-duty, 3 adjustment planes, up to 45" antenna.



Maldol PRM-T Heavy-duty, 3 adjustment planes, up to 80" antenna.



Maldol MK-30H 12VDC motorized mount. Mounts to vertical or horizontal door lip. Up to 70"/19 oz. antenna.



Maldol EM-500 Light-duty, 2 adjustment planes, up to 40" antenna.

COMET GRB-5M Trunk lip mount, low-profile, black anodized stainless steel. Offset washers provide up to 17 deg vertical adjustment of antenna. 16'9" of deluxe cable included, 18" of mini RG-188A/U style coax for easy entry thru the weather seal. Gold-plated SO-239/PL-259 connectors.



The rear doors on newer trucks are the perfect place to mount antennas: • No holes to drill • Above roof line • Easy access

When mounting to a van, SUV, truck, etc., use the CP-5M or build your own system with components shown above. There are several mount sizes, coax diameters and coax lengths from which to choose.



For a complete catalog, call or visit your local dealer. Or, contact NCG Company.
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1714 Long Ranger™ 2M Halfwave For really long range, this MFJ end-fed half-wave is hard to beat. It outperforms a 5/8 wave on a handheld because it does not need a ground plane. The 1714 is shorter (40" extended), lighter, has more gain & places less stress on your antenna connector. When collapsed (10.5"), it performs like a rubber duck... **\$16.99**

1712 Dual Bander™ 2M and 440MHz New dualband handheld or separate units? One antenna fits all. It's 1/4 wave for 2m and 5/8 wave with gain for 440MHz. 7.25' collapsed, 19' extended..... **\$14.99**

1710 Pocket Linear™ 3/8 Wave, 2M Carry in your pocket like a ballpoint pen. When using your rubber duck, on the fringe and noisy, put on the Pocket Linear, extend to 24.5" and carry on your QSO. Pocket clip. 5.25" collapsed..... **\$9.99**



RUFFRIDER™ MOBILE ANTENNAS

(mounts not included)

This series features quality construction using precision machined components. Designed to battle the elements, rugged rides and highway abuse.

Dual band 144/440MHz mobiles have stacked stainless steel elements with high-Q phasing coils resulting in outstanding gain. Phased radiators flatten radiation patterns and concentrate transmit power at the horizon for maximum distance.

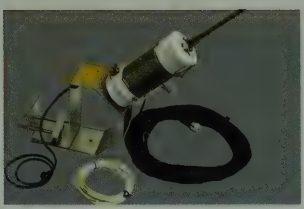
All models are factory tuned for SWR less than 1.5:1 and have 50Ω impedance. Each comes w/SO-239 base, but also includes a **FREE** NMO adapter.

1402 Junior 16.5" antenna fits in any garage on any vehicle. Unity gain on 2M, 3dB gain on 440 MHz. Handles 100W. No fold-over **\$34.99**

1412 High Power Only 40" long but handles a full 200W. Great for high power mobile & amp. 3dB on 2M, 5.5dB on 440MHz..... **\$49.99**

1422 High Gain 41.5" long giving you extra gain with little increase in height. Handles 150W. 3.2dB on 2M, 5.7dB on 440MHz..... **\$49.99**

1432 Highest Gain Tall 62.5" brute gives you a whopping 5dB gain on 2M, 7.6dB gain on 440MHz. Handles 150W..... **\$69.99**



1622 Apartment Antenna (top) Operate 40-10M, 6M and 2M, up to 300W P.E.P. Tuning is accomplished by changing the tap on the highly efficient air-wound coil and adjusting the counterpoise for best SWR. Its universal mount/clamp lets you easily attach it to window frames, balconies and railings. It also works great indoors mounted to a desk, table or bookshelf. The 5.5' radiator collapses to 2.5' for easy storage and carrying. It includes 50' of coaxial cable, RF choke balun, 50' of coax, counterpoise wire and safety rope..... **\$89.99**

1624 HF Mini Bugcatcher Operate 40-6M, up to 300W P.E.P. Tune by changing the tap on the efficient air-wound coil and adjusting the counterpoise for best SWR. The 5.5' whip collapses to 2.5' for storage or avoiding a garage door. Use trunk lip, mirror, luggage or tri-mag mount **\$79.99**

1778 All-Band G5RV Antenna Center fed, 102' flat top with a 300Ω twinlead feeder system and SO-239 connector to accept the 52Ω coax run from the shack. This unique design covers all bands 80 thru 10 meters with a nominal VSWR, so using an antenna tuner is recommended with most rigs. Also can be installed as an inverted vee or sloper. Works great on 160 meters operating as a Marconi with tuner and good ground. Handles 1500W..... **\$39.99**



1910 Telescoping Fiberglass Mast (right) Great for portable and temporary use - traveling, camping, hotels, hamfests, field day, DX-peditions. Use to construct loops and quads. Pull out each section and twist to lock, strong fiberglass, flexes to resist breaking. Extends to 33' and collapses to 3.8" Bottom section 1.75" diameter. 3.3 lbs **\$79.99**

1899T Walkabout™ Multi-band Telescopic Antenna Designed specifically for the Yaesu FT-817 multi-mode HF/VHF/UHF portable transceiver or other QRP portables. Covers all bands (including WARC bands) from 80 to 6 meters. Power rating is 25 Watts. When fully extended it is just over 5' long and is fitted with a BNC connector. Band changing is achieved by plugging a lead into the appropriate socket on the base coil, and fine tuning using the 10-section telescopic whip. The whip unscrews from the base matching coil, so, collapsed, the antenna measures only about 8 inches..... **\$129.99**

MFJ Manually Tuned Screwdriver Antenna Small and lightweight, supplied with a 4.5' telescopic whip for mobile and a 10' telescopic whip for greater efficiency stationary use. Quickly and easily tuned by sliding the aluminum cover over the coil. Copper beryllium finger stock completely surrounds the coil for solid connection as tuning is accomplished. Unused turns on the antenna are shorted out and completely shielded. Once tuned, a nylon tipped thumbscrew locks the cover in place to prevent movement. The 4.5' whip collapses to 23", the 10' whip to 19". Coil and whips can easily be packed into a backpack for hiking or camping. A standard 3/8" x 24 male mount in the base makes it easy to connect to existing mount.

1661 40-2M, 12", 1 lb..... **\$109.99**

1664 80-6M, 15", 1.25 lbs **\$139.99**



1020C Indoor Active Antenna 300 kHz-30MHz; 5 bands. Telescoping (21") antenna provides good signal strength. Functions as a preselector when using an external antenna - minimizes intermod, improves selectivity, reduces noise. Uses 9V battery, 9-18V DC or 110V. 5" w x 12" h x 6" d..... **\$79.99**

1024 Outdoor Active Antenna For 50kHz to 30 MHz reception. Separate RF amp module with 54" whip mounts outside, interconnect made by supplied 50' coax to control unit, containing gain control and 20dB attenuator. Select between 2 receivers & auxiliary antenna. Auxiliary in/output jacks. 12VDC or 110VAC. Control: 6" w x 2" h x 5" d, Module: 3" h x 4" w x 4" d..... **\$129.99**



Miracle Antenna

MIRACLE WHIP All-Band, Rig-Mounted, Tunable Whip For the FT-817, and other QRP (5W) or SWL rigs. The Miracle Whip is the only completely self-contained, all-band 57" telescoping whip antenna with integrated tuner for receiving and transmitting that mounts right on a radio's antenna connector. Continuous tune 0.6 to 500 MHz rx and continuous tune 3.5 to 450MHz tx. The continuously variable auto transformer design operates effectively without any added counterpoises as the continuously variable nature permits finding a good match when there is no "standard" counterpoise attached. In effect, it uses whatever ground paths are available as a counterpoise..... **\$139.99**



R6000 MULTIBAND VERTICAL

6 - 20 Meters

The Shape of Things to Come

The R6000 is a 6 through 20 meter, no ground radial antenna. It includes many of the features of the R8, R7 and R5 antennas. R6000 means excellent performance, easy installation and use, slim silhouette and high reliability. There are no traps used on 6, 10 and 15 meters for maximum efficiency and power handling.

► EASY INSTALLATION

For typical use, tuning is not required

► AUTOMATIC BAND CHANGING

To any band 6 through 20 meters

► SLIM SILHOUETTE

Gain favor of family and neighbors with the slim, low profile of the R6000

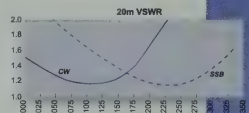
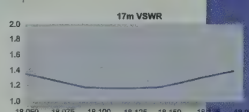
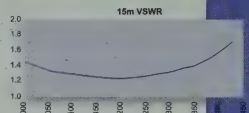
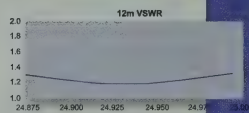
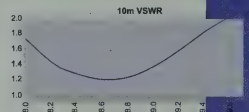
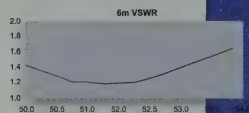
► 6 METER OPERATION

Join the fun of the "Magic Band" and take advantage of the new HF/50MHz transceivers

► AFFORDABLE PRICE

Cushcraft delivers the best quality and performance at a price no one else can match.

SPECIFICATIONS	R6000
Frequency, meters	6, 10, 12, 15, 17, 20
Gain, dBi	3
VSWR minimum	1.2:1 typical
2:1 bandwidth, KHz	6m >1300 10m >1700 12m >100 15m >450 17m >100 20m 300
Power, Watts output	1500
Radiation angle, deg.	16
Horizontal rad, deg	360
Height, ft (m)	19 (5.8)
Mast size range, in (cm)	1.5 -1.75 (3.8-4.4)
Wind load, ft ² (m ²)	1.5 (.14)
Weight, lb (kg)	12.5 (5.6)



The R6000 employs quarter wavelength stubs on 10 and 15 meters to replace standard trap coils. The result is lower loss and wider bandwidth. The R6000 covers all bands 6 through 15 meters at a VSWR under 2:1. On 20 meters you can select the top 300 KHz or bottom 300 KHz of the band.

The R6000 weighs only 12-1/2 pounds (5.6 kg). It is lightweight and easy to mount for portable or permanent installations. Machined aluminum clamps and UV stable insulators guarantee years of reliable service. The R6000 comes with the standard Cushcraft warranty of one year from purchase - plus the industry's leading technical support team stands behind each Cushcraft antenna.

The R6000 makes an excellent diversity antenna to complement even the most complete stations, or pack up the R6000 for a trip to the DX location of your dreams.





6-40 Meters

R8 MULTIBAND VERTICAL

HF Multiband Vertical Antenna

6, 10, 12, 15, 17, 20, 30, 40 Meter

Here is Cushcraft's newest multiband HF vertical antenna. This multiband vertical design provides 8 band coverage encompassing the 6, 10, 12, 15, 17, 20, 30 and 40 meter bands.

Cushcraft has achieved a major breakthrough in the development of an HF multiband vertical antenna that has been specifically designed for use with a tuner and amplifier. As a result, the antenna more accurately addresses the needs of the contemporary ham shack.

Multiband vertical antennas have always been complicated designs with components as likely to be damaged by high levels of mismatched transmit power as the rigs they are attached to. Before the use of tuners became widespread, the antenna was protected by the same safety mechanisms that protected the rig. Now, the automatic power reduction circuits of the past have actually become a second layer of protective circuitry. Although the auto-tuner provides the ham with a more versatile device as well as protecting the rig's components, the antenna is more vulnerable than ever. With the press of a button, very high loads can be imposed on the antenna. The result to the antenna can be catastrophic failure in some instances.

The R8 is the first multiband vertical designed for the rigors of contemporary operating conditions. Although the antenna is best operated within it's 2.0:1 VSWR bandwidth, it can sustain a 3.0:1 VSWR mismatch at full power for typical operating intervals. Now radio amateurs can take full advantage of the versatility that a tuner used in conjunction with a multiband HF vertical antenna can give them. *For high wind environments, add the R8GK Guy kit—three point non-conductive guy system.*

- ▶ **RUGGED CONSTRUCTION**
- ▶ **INSTANT BAND CHANGING**
- ▶ **SLIM, LOW PROFILE SILHOUETTE**



SPECIFICATIONS

R8

Frequency, meters: 6,10,12,15,17,20,30,40
Gain, dBi: 3
VSWR 2:1 bandwidth, KHz:

40m (150)

30m (>50)

20m (>350)

17m (>100)

15m (>450)

12m (>100)

10m (>1500)

6m (>1500)

VSWR at resonance (typical):

1.3:1

Power Rating, Watts PEP:

1500

Vertical Radiation angle, deg.:

16

Horizontal rad, deg.:

360

Height, ft(m):

28.5 max. (8.7)

Wind survival:

80 mph

Weight, lb. (kg):

23 (10.5)

Shipping Dimensions:

3-3/4" x 5-1/4" x 84-1/2"



R8's Rugged Design

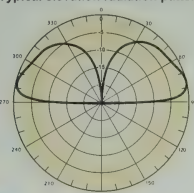
Generous use of stainless steel machine screws guarantees base integrity

Dual plate rod mount allows for easy assembly of ground components

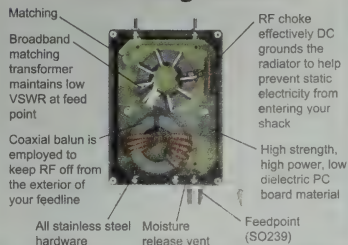
Plate interfaced mounting system uses aluminum components and stainless steel hardware

Even if you aren't using a tuner and amplifier, you will appreciate this antenna's rugged, heavy duty components. The R8 is easy to assemble and is built to provide years of trouble free service and satisfaction.

Typical elevation radiation pattern




R8 Matching Network



CUSHCRAFT
CORPORATION

INTRODUCING, MA5V/MA6V VERTICALS

 **6 - 20 Meters**



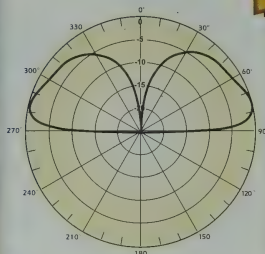
MA5V Five-Band Restricted-Space Vertical Antenna

- ▶ Light-weight rugged construction
- ▶ Rapid breakdown for storage or transport
- ▶ No exotic matching networks or tuners
- ▶ Advanced "no radial" OCFD design

Cushcraft's new MA5V delivers superb HF multi-band performance while maintaining a neighbor-friendly low profile. Perfect for roof-mounts, patios, small backyards, condos, and motor homes, this 6.5-pound bantam-weight installs quickly without the "heavy lifting" required of larger antennas. Whether you install it permanently or take it down between operating sessions, you'll appreciate special features like the MA5V's gust-absorbing fiberglass base, resin-sealed resonator coils, aluminum mast blocks, and all-stainless hardware. Best of all, the MA5V is solidly engineered—its "no-radial" OCFD design delivers low SWR and high performance without using exotic matching networks or tuners. Simply connect a radio and you're ready to work the world! The MA5V is the perfect restricted-space DX solution for 20, 17, 15, 12, and 10 meters!

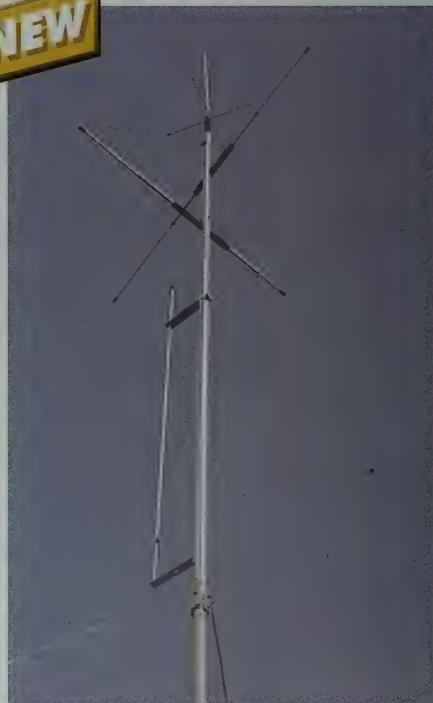
MA6V Six-Band Restricted-Space Vertical Antenna

Made for today's expanded-coverage radios, Cushcraft's MA6V provides the same great versatility and performance of the MA5V—with the addition of 6 Meters. Enjoy congestion-free FM-repeater operation and explore the world of exotic seasonal band openings on 50 MHz CW and SSB. It's a great way to add amateur radio's "magic band" to your operating repertoire!



Typical elevation radiation pattern

NEW



SPECIFICATIONS	MA5V	MA6V
Frequency, meters:	20, 17, 15, 12, 10,	20, 17, 15, 12, 10, 6
Gain, dBi:	1-2	1-2
VSWR at resonance:	1.2:1 All bands	1.2:1 All bands
Maximum Wind Surface:	.82 ft ² (.076 m ²)	.82 ft ² (.076 m ²)
Wind Survival, mph:	>80	>80
Maximum Power PEP:	250 W	250 W
Height, ft (m):	14.7 (4.48)	14.7 (4.48)
Mast size, in (cm):	1.25 -2.0"	(3.18-5.1)
Weight, lb (kg):	6.5 (2.95)	6.9 (3.13)
Shipping Dimensions:	3" x 3" x 80-1/2"	3" x 3" x 80-1/2"



The Director, Small Footprint-Big Signal

MA5B. Cushcraft's newest multiband HF antenna provides 5 band directivity in a package small enough to mount to a tripod. The MA5B is a design that does not sacrifice ruggedness, performance and power handling for size and ease of installation.

- I am delighted with the performance compared with other HF antennas I have been using!

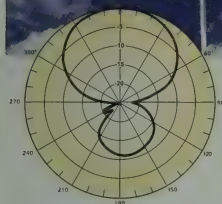
Bob Swannell, MOBYA

- Thank you for making a fine quality, powerful mini beam that can fit anyone's budget.

Phil West, KF2WL

SPECIFICATIONS

	MA5B				
Frequency, MHz	10	12	15	17	20 Meters
Elements	2	1	2	1	2 per band
Gain	53	10	48	10	36 dBi
Front to Back Ratio	10	0	12	0	22 dB
Sideloobe Attenuation	25	25	25	25	25 dB
VSWR 2:1 Bandwidth	665	>110	255	>100	90 kHz
Longest Element	17.1ft (5.2m)				
Turning Radius	88ft (2.7m)				
Boom Length	73ft (2.2m)				
Boom Diameter	1.5in (3.8cm)				
Max. Wind Surface Area	3.22 ft ² (3m ²)				
Max. Power Handling	1.2 kw				
Weight	26.5 lbs. (12kg)				



High Front To Back Ratio
On 10/15/20m

• **Easy To Tune**
No complicated gamma matches to adjust.

• **Low VSWR**
Flat response across all 5 bands. VSWR minimum 1.2:1.

• **Single Feed Point**
Only one coaxial feed line is necessary for all 5 bands.

• **Rugged Construction**
Cushcraft's tried and true stainless steel mounting hardware and heavy wall aluminum tubing make for a rugged, long lasting antenna.

• **Easy To Turn**
With a boom length of 7 feet and a longest element length of 17 feet, a lightweight TV rotor will do the trick.

BIG THUNDER TRIBANDER

X7



- ▶ New High Efficiency Computer Optimized Design for Maximum Gain and Ultra Clean Radiating Pattern
- ▶ 100+ MPH Construction for Best Reliability and Long Life
- ▶ NEW 4L Log Cell Driven Elements for better VSWR Bandwidth
- ▶ Trapless Driven Elements and Reflectors for Reliable Power Handling
- ▶ Interleaved Element Design for Mono-Band Performance
- ▶ Add-on kits available for 40 Meters

40 Meter Add On Kits

MODEL	X740
Band	7 MHz
Element Length ft. (m)	41 (12.5)
Power (W)	2KW
Weight	20lbs. (9.1 kg)



Element Hardware

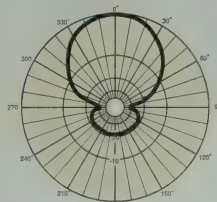


Boom-to-Mast

The X7 Triband Yagi is geared to set new standards in both radiating performance and mechanical reliability. Cushcraft's product development team has employed the latest computer modeling technology to achieve a superior electrical design as well as elegant new mechanical hardware and assembly techniques.

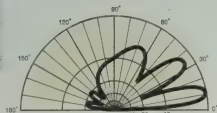
Each mechanical component was designed to 100+ MPH wind survival with a 1.25 safety factor. Traps were eliminated from the high current driven elements and reflectors using the new 4L Log Cell design, which yields virtual monoband performance and maximum power handling capability. Traps are employed only in the lower current directors for increased gain and sharper pattern. The result is a truly high performance antenna which will easily handle the legal limit.

X7



Azimuth

Typical radiation patterns.
Height: One wavelength.
Frequency: 20 M



Elevation

SPECIFICATIONS

	X7
Frequency Coverage (Meters)	10, 15, 20
Total number of Elements	7
Maximum Gain (dBi)	20M 12.5 @ 14 deg
@ One Wavelength	15M 13.0 @ 12 deg
	10M 12.9 @ 14 deg
Maximum Front to Back Ratio (dB)	30
Number of Elements per Band	3
VSWR Minimum	1.1:1
VSWR 1.5:1 Bandwidth (KHz)	20M 600
	15M 750
	10M 1700
Longest Element, ft (m)	37.2 (11.33)
Turning Radius, ft (m)	20.0 (6.09)
Boom Length, ft (m)	18 (5.49)
Boom Diameter, in (cm)	2-1/2 (6.35)
Maximum Mast Diameter OD, in (cm)	2-1/2 (6.35)
Maximum Wind Survival, mph (kph)	>100 (>161)
Maximum Wind Surface Area, ft ² (m ²)	7.9 (.73)
Windload @ 80 mph, lb (kg)	202 (92)
Maximum Power Handling (KW)	2
Weight, lb. (kg)	60 (27.2)

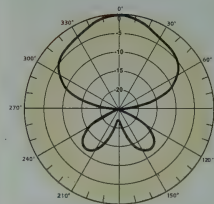
ASL670 LOG PERIODIC ANTENNA

6 Meter - 70 CM

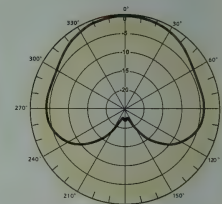


The antenna exhibits excellent gain and f/b with good VSWR bandwidth to boot. Get one today and enjoy the fun of high performance operation and multi-frequency listening all in one compact antenna.

- ▶ Rugged construction
- ▶ Easy to install
- ▶ Wide band Log Periodic
- ▶ Easy to turn



E-Plane

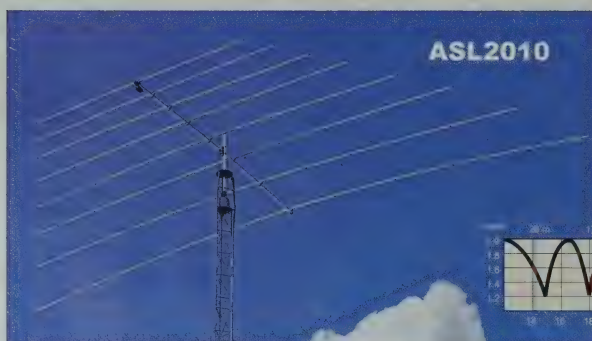


H-Plane

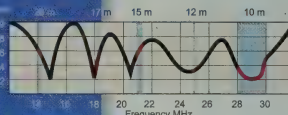
ASL670 Log Periodic

Cushcraft's new ASL670 is the ultimate multi-use antenna. Since the antenna is a log periodic, it offers continuous coverage through the 2 and 6 meter bands as well as 220 and 440 MHz. So, while being a terrific antenna for operating on those bands, it is also a great aviation and public safety band monitoring antenna. Use the antenna for contesting and mountain topping if you like. The antenna is compact and easy to assemble and disassemble with no tuning required. Yet it is rugged enough for permanent installation. The ASL670 really shines in its performance specs.

MODEL	ASL670
Frequency, MHz:	50 - 450, Continuous
No. Elements:	14
Forward Gain, dBi, dBd:	6.5, 4.5
Front to Back Ratio, dB:	20
SWR:	1.5:1 Average
Power Rating, Watts PEP:	300
3dB Beamwidth, Degrees, H-Plane:	110
E Plane:	80
Boom Length, ft (m):	6'-8" (1.9)
Boom Size, in (cm):	1.0 x 2.75 (2.54 x 7)
Longest Element, ft (m):	126.6" (3.22)
Turning Radius, Horizontal Mtg. ft (m):	6'-3" (1.9)
Turning Radius, Vertical Mtg. ft (m):	3'-9" (1.15)
Mast Size Range, in (cm):	1.5"-2.5" (3.8-6.4)
Wind Load, ft ² (m ²):	3.0 (28)
Weight, lb (kg):	11-1/4 (5.15)



- ▶ Continuous five band coverage from 13.5 to 32 MHz
- ▶ Constant over entire frequency range
- ▶ 6.4 dBi gain, 65 degree beamwidth
- ▶ High efficiency design, antenna stays cool and VSWR steady
- ▶ 18 foot boom and 19.5 foot turning radius



Skylog

The ASL2010 log periodic antenna is the most cost effective, high gain, five band antenna solution on the market today. Skylog offers continuous operation from 13.5 to 32 MHz. Antenna gain and beamwidth are constant for uniform coverage from 10 through 20 meters. The ASL2010 is rated for continuous duty at full legal power. Skylog is designed for maximum gain on a manageable 18 foot boom with only 10.1 square feet of wind surface area. All stainless steel hardware and rugged element design are only some of the many features that provide years of superior antenna performance. Skylog ASL2010 is the smart choice for multiband HF operation.

MODEL	ASL2010
Frequency, MHz	13.5-32
No. Elements	8
Forward Gain, dBi	6.4
Front to Back Ratio, dB	15-20
SWR 1.2:1 Typical	
2:1 Bandwidth	18.5 MHz
Power Rating, Watts PEP	2000
3dB Beamwidth, Degrees	
E Plane	65
Boom Length, ft (m)	18 (5.48)
Boom Diameter, in (cm)	2.0 (5.08)
Longest Element, ft (m)	38 (11.58)
Element Ctr Dia., in (cm)	1.25 (3.18)
Turning Radius, ft (m)	19.25 (5.86)
Mast Size Range, in (cm)	1.5-2 (3.8-5.1)
Wind Load, ft ² (m ²)	10.1 (93)
Weight, lb (kg)	55 (25.5)



10-40 M

WORLD RANGER MULTIBAND HF YAGIS

A4S Four Element Beam - 10, 15 & 20 Meters

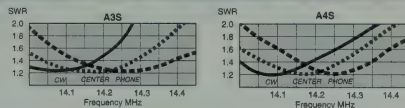
With stainless steel hardware.

The A4S is the true, high performance tribander. Precisely tuned high-power traps, carefully selected element lengths, and proper spacing combine to make the A4S the preferred antenna for your HF work! This is the premium antenna with all the features that you want. High gain, low SWR, and wide bandwidth keep the contacts coming in. All U-bolts, clamps and hardware are stainless steel. The A4S has pinned boom sections and formed aluminum brackets to keep elements straight under all conditions. Our solid construction keeps the A4S on the tower! Add 40 meters with A744 kit.

A3S Three Element Beam - 10, 15 & 20 Meters

With stainless steel hardware.

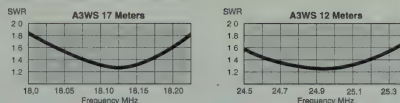
The A3 World Ranger, our top selling tribander, has become the A3S with all stainless steel hardware. It's a real power-house in a small space and lets you work the pile-ups with confidence. All you need is a lightweight tower and rotator to enjoy the benefits of the A3S. It's a proven performer in DX-peditions and contests and handles full power from your linear. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware. When space is at a premium, but you want the benefits of a full-size tribander, the A3S is right for you! Add 40 meters with A743 kit.



A3WS WARC Bands 3 Element - 12 & 17 Meters



Enjoy the excitement of the WARC bands with this popular beam. The A3WS gives full performance on 12 and 17 meters. With the addition of our easy-to-use A103 add on kit, it will also cover 30 meters. A3WS needs only a lightweight tower and rotator or you can mount it above an existing tribander. Construction features include pinned boom sections, heavy duty element clamps with backing plates plus all stainless steel hardware.



MODEL	A4S	A3S	A3WS
Frequency, MHz	28, 21, 14	28, 21, 14	24, 18
No. Elements	4	3	3
Forward Gain, dBi	8.9	8.0	8.0
Front to Back Ratio, dB	25	25	25
SWR 1.2:1 Typical			
2:1 Bandwidth KHz	>500	>500	300
Power Rating, Watts PEP	2000	2000	2000
3 dB Beam Width, Deg. E Plane	58	60	60
Boom Length, ft (m)	18 (5.48)	14 (4.27)	14 (4.27)
Boom Diameter, in (cm)	2 (5.10)	1.5 (3.81)	1.5 (3.81)
Longest Element, ft (m)	32 (9.75)	27.75 (8.45)	25.1 (7.66)
Element Center Dia, in (cm)	1.25 (3.18)	1.25 (3.18)	1.25 (3.18)
Turning Radius, ft (m)	18.4 (5.49)	15.5 (4.72)	14.4 (4.4)
Mast Size Range, in (cm)	1.25-2.00 (3.18-5.08)	1.25-2 (3.18-5.08)	1.25-2 (3.18-5.08)
Wind Load, ft ² (m ²)	5.50 (0.51)	4.36 (0.47)	4.1 (0.38)
Weight, lb (kg)	37 (16.8)	27 (12.9)	22.5 (10.2)

30 & 40 Meter Add-On Kits - For A3S, A4S & A3WS

40 meters will come alive by adding one of these kits to the dipole of your A3S or A4S. The kits include high power traps with heavy wall fiberglass insulator and all hardware. A simple adjustment allows 30 meter operation. For our newest beam, the A3WS, we have a 30 meter add on kit the A103.

A743 7 MHz/10 MHz kit for A3S
 A744 7 MHz/10 MHz kit for A4S
 A103 10 MHz kit for A3WS

MODEL	A743/A744	A103
BAND	7 MHz (40 m) 10 MHz (30m)	10 MHz (30m)
Driven Element with Adapter kit, ft (m)	33.19 min. 35.33 max. (10.12-10.77)	27.12 min. 28.4 max. (8.27-8.66)
Windloading ft ² (m ²)	.58 (.05)	.27 (.03)
Bandwidth, KHz	125	150
Power Rating, Watts	2000 PEP	2000 PEP
Side Rejection, dB	20	20
Weight, lb (kg)	3.44 (1.56)	2.29 (1.04)

Rotatable Dipoles

Our World Ranger Dipoles give bi-directional patterns and rotatable convenience. You can mount them high and away from the trees for better performance than a wire dipole. These single and multi-band dipoles feature high-performance traps, heavy wall tubing, and rugged hardware for years of enjoyment.



MODEL	D40	D4	D3	D3W
Frequency, MHz	7	28, 21, 14, 7	28, 21, 14	24, 18, 10
SWR 1.2:1 Typical				
2:1 Bandwidth, KHz	200	>350 40-125	>500	>200
Power Rating				
Watts PEP	2000	2000	2000	2000
Length ft	42.25	35.8	25.8	34.0
(m)	(12.88)	(10.92)	(7.86)	(10.37)
Mast Size, in (cm)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)	1.5-2 (3.8-5)
Wind Load, ft ² (m ²)	1.3 (1.2)	1.3 (1.2)	.9 (0.8)	.9 (0.8)
Weight, lb (kg)	12 (5)	13 (6)	9 (4)	11 (5)



CUSHCRAFT CORPORATION

MULTIBAND DIRECTIONAL YAGI

 **6/2 Meter, 70 CM,**



A627013S 6 Meter/2Meter/70 CM

Cushcraft's newest multiband directional yagi is designed to provide hobbyists who have limited tower or mast space with directional antenna performance on three of the most popular bands. The A627013S combines 6 meters, 2 meters and 70 centimeters on one boom. Since the three antennas were designed to share a common boom, the A627013S solves the often encountered problem of degraded antenna performance due to inadequate spacing when using separates.

MODEL	A627013S		
Frequency, MHz	50-54	144-148	430-450
No. Elements	3	5	5
Forward Gain, dBi	8	10	10
Front to Back Ratio, dB	20	20	18
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>1	>4	>10
Power Rating, Watts PEP	1000	350	350
3dB Beamwidth, Degrees			
E Plane		48.5	48.5
H Plane		60	60
Boom Length, ft (m)		8.66 (2.66)	
Longest Element, in (cm)		117 (300)	
Turning Radius, ft (m)		6.16 (1.87)	
Mast Size Range, in (cm)		1.25-2 (3.2-5.1)	
Wind Load, ft ² (m ²)		2.52 (0.23)	
Weight, lb (kg)		9.5 (4.3)	

- ▶ Outstanding performance thanks to Cushcraft's unmatched multiband design technology and experience.
- ▶ Rugged stainless steel mounting hardware is easy to install and maintain.



Big Thunder Monobander

Cushcraft's XM240 monobander utilizes rugged Big Thunder hardware that combined with high strength aluminum tubing affords the antenna outstanding wind survivability. Phillystran boom trusses are used in the XM240 design for extra boom stability. The feed system is a 50 ohm direct feed with dual driven elements. VSWR is flat across the band. A high power 1:1 balun is included. The XM240 is field-proven for reliability and performance. Excellent front to back ratio and gain makes the XM240 the right choice for DX and for stacking as well.



MODEL	XM240
Frequency, MHz	7.0 - 7.3
Number Elements	2
Forward Gain Free Space, dBi	6.0
Fwd Gain @ 1 Wavelength Ht, dBi @ 14 deg	12.5
Front to Back Ratio, dB	20-25
VSWR Typical Minimum	1.1:1
VSWR 1.5:1 Bandwidth, KHz	150
Power Rating, Watts Output	1500
3dB Beamwidth, Degrees	70
Side Lobe Attenuation, dB	>35
Boom Length, feet (m)	22 (6.7)
Boom Diameter, inches (cm)	2.5 (6.3)
Longest Element, feet (m)	43 (13.1)
Turning Radius, feet (m)	24.3 (7.4)
Max Mast Size, inches (cm)	2.5 (6.35)
Wind Surface Area, sq ft (sq m)	5.5 (5.1)
Wind Load @ 80 mph, lbs (kg)	142 (64.4)
Weight, lbs (kg)	55 (25)

RINGO RANGER II, RINGO RANGER, RINGO



70 CM, 1 1/4 M, 2 M



Some hams comment on the ARX2B:

"Since I put this antenna up I have received many compliments on the improvement of my signal." (N3LHP)

"The only antenna I ever installed that worked like it should the first time." (N7PGH)

"ARX2B is a good antenna for my use on 2 meters FM...Several on the air in my area." (N9OPL)

"ARX2B...the best antenna." (XE2CLB)

Our Rings are Number One

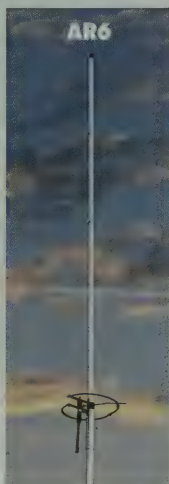
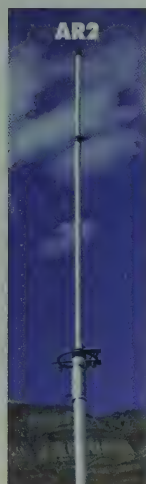
Tough performers at a good price! The Ringo family of dependable, cost-effective antennas has served more hams - from novice to veteran extra - than any other amateur antenna made. Simple, straightforward design, light weight and quick, easy installation make the durable Ringo family right for you. Ringo's top performance and low cost mean more dB per dollar - an equation anyone can appreciate.

Ringo Ranger II

Our Ringo Ranger II has more gain, less windload, and more mechanical integrity than other two meter antennas. You'll quickly appreciate the benefits of this amazing antenna! Based on the original W1BX Ringo, the Ringo Ranger II is the latest design featuring three 5/8 wave radiating elements and an adjustable 1/8 wave phasing stub. The result is a very low angle of radiation over your coverage area.

The Ringo Ranger II has built-in lightning protection, UV-stabilized insulators, heavy wall tubing, improved decoupling radials to eliminate feedline radiation, and all-weather performance.

MODEL	ARX2B	ARX220B	ARX450B
Frequency, MHz	135-160	222-225	435-450
SWR 1.2:1 Typical			
2:1 Bandwidth, MHz	>3	>5	>10
Gain, dBi	7.0	7.0	7.0
Power Rating, Watts FM	1000	500	500
Radiation Angle, Deg.	7	7	7
Horizontal Radiation			
Pattern, Degrees	360	360	360
Ring Diameter, in (cm)	5 (12.7)	5 (12.7)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	.75 (1.9)	.50 (1.2)
Height, ft, (m)	14 (4.3)	9.3 (2.8)	4.9 (1.5)
Mast Size Range, in (cm)	1.0-1.25 (2.54-3.1)	1.0-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Radial Length, in (cm)	20.5 (52.1)	13.75 (33.7)	6.75 (17.1)
Wind Load, ft ² (m ²)	0.5 (0.05)	0.3 (0.03)	0.2 (0.02)
Weight, lb (kg)	6 (2.7)	5 (2.3)	1 (.45)



Ringo

These are the original W1BX FM Ringos. If you want a combination of compact size, wide bandwidth, a low radiation angle, these economical antennas are just for you. Since radials are not needed, you can even use our Ringos indoors. Our Ringos are 1/2 wave and include built-in lightning protection. Put up one of these easily installed antennas and start enjoying FM!

MODEL	AR2	AR6	AR10	AR450
Frequency, MHz	135-160	50-54	28-29.7	440-460
SWR 1.2:1 Typical				
2:1 Bandwidth, MHz	10	2	>1.5	20
Gain, dBi	3	3	3	3
Power Rating, Watts FM	1000	1000	1000	500
Radiation Angle, Deg.	16	16	16	16
Horizontal Radiation				
Pattern, Degrees	360	360	360	360
Ring Diameter, in (cm)	5 (12.7)	13 (33)	13 (33)	3.5 (8.9)
Radiator Base Dia, in (cm)	.75 (1.9)	1 (2.5)	1 (2.5)	.5 (1.3)
Height, ft, (m)	3.9 (1.2)	10.1 (3.1)	17.6 (5.36)	1.4 (.43)
Mast Size Range, in (cm)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	1-1.25 (2.54-3.1)	.75-.88 (1.9-2.22)
Wind Load, ft ² (m ²)	.21 (.02)	.37 (.03)	1.68 (.16)	.1 (.01)
Weight, lb (kg)	1.5 (.68)	2.5 (1.1)	4 (1.8)	1 (.45)

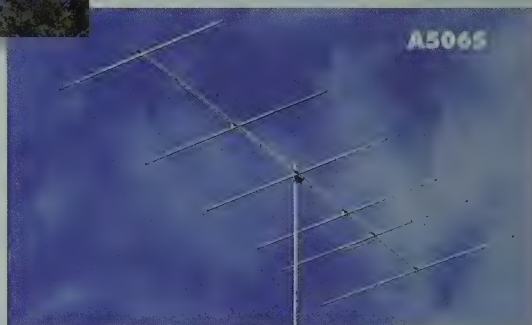


CUSHCRAFT
CORPORATION



6 Meter Yagis - SSB/CW/FM

Computer-aided modeling and test range techniques were used by Cushcraft engineers to further optimize the performance of our popular 6 meter Yagis. This process means more gain and cleaner patterns with excellent front-to-back ratios. S-models have very broad bandwidth so they will not detune in bad weather. They feature stainless steel hardware for long trouble-free life. Enjoy the new popularity and exciting contacts on the 6 meter band with one of the S-series Cushcraft Yagis. The A503S, A505S and A506S may be mounted vertically for FM use.



10 Meters

Looking for a lightweight, economical alternative to the 10 meter big boys? Choose the TEN3. Although it's popular with novices and technicians, this antenna is for any ham who wants more gain with a good front to back ratio on 10 meters. This antenna has an 8 foot boom (2.4m) making it easy to install on a very simple mount with only a light rotator. The matching system is our proven Reddi-Match for 50 Ohm no balun feed and SO-238 connector. Make more positive contacts with the TEN3.

MODEL	A503S	A505S	A506S	TEN3
Frequency, MHz:	50-54	50-54	50-54	28-29.7
No. Elements:	3	5	6	3
Forward Gain, dBi:	8	10.5	11.6	8
Front to Back Ratio, dB:	20	24	26	25
SWR 1.2:1 Typical:				
2:1 Bandwidth, MHz:	>1	>1	>1	>1.5
Power Rating, Watts PEP:	1000	1000	1000	1500
3dB Beamwidth, Degrees				
E Plane:	76	56	48	64
Boom Length, ft (m):	6 (1.8)	12 (3.7)	20 (6.1)	8 (2.44)
Longest Element, in (cm):	117 (300)	123 (312)	119 (302)	18 (5.49)
Turning Radius, ft (m):	6 (1.8)	7.8 (2.37)	11.5 (3.5)	9.8 (3.0)
Mast Size Range, in (cm):	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)	1.5-2 (3.8-5.1)
Wind Load, ft2 (m2):	1.80 (0.17)	2.9 (0.273)	4.46 (.41)	2.0 (.20)
Weight, lb (kg):	7 (3.2)	11 (5.0)	18 (8.2)	9.9 (4.45)



BOOMER SIDEBAND/CW YAGIS



2 Meters

13B2

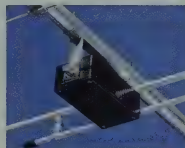


13B2 - 13 Element Wideband Boomer

The 13B2 is as versatile as the 17B2 is specialized. 13B2 will be your choice for high performance across the entire 2 meter band. New and experienced hams will enjoy 15.8 dBi gain on FM, packet, CW, or sideband across the 4 MHz operating range. The 13B2 is easily mounted vertically or horizontally for maximum performance on your favorite mode. Its optimum boom length makes it a popular antenna that fits just about anywhere. The new UltraMatch balanced feed on the 13B2 provides a 50 Ohm match via a standard SO-239 UHF female connector. Model 13B2N has N connector.

17B2 - 17 Element CW/SSB Boomer

The serious two meter operator who is interested in EME, aurora, scatter, SSB, CW, tropo etc, will choose the 17B2. It has 17 elements on a 4.5 wavelength boom. Our computer-aided design supported by precise test range data and the latest manufacturing technology gives you a cleaner pattern and 18 dBi gain in this long boom design. Significant enhancement is provided by the new UltraMatch balanced feed system with N-connector.

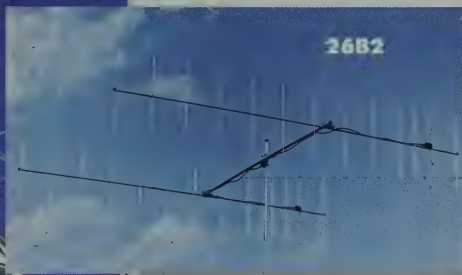


The new Cushcraft UltraMatch is a modified T-match system that provides a balanced current distribution on your Boomer. It uses UltraLink teflon® dielectric cable allowing for low loss high power applications. UltraMatch is completely enclosed for weather proofing. UltraMatch features an N-connector on the 17B2 and UHF SO239 on the 13B2. When all weather performance is important, you will choose the new UltraMatched Boomers everytime.

17B2



26B2



26B2 - 26 Element Wideband Boomer

This antenna offers the highest gain of any 2 meter FM antenna in the world. The 26B2 includes two complete 13B2 antennas, stacking boom and phasing harnesses.

124WB - 4 Element Wideband Boomer

This is the right choice for packet systems and other applications requiring a dedicated directional antenna.



124WB

A14810S & A1483S 2M Yagis

These antennas are the newest computer optimized models of our 2 meter Yagis. We have improved both the pattern and gain to give you better FM coverage.

The A1483S is the low priced quality leader for Packet, FM or even portable use. It is easily rear mounted.

A14810S is one of our best value designs with excellent gain and front-to-back ratio. Use it for long range FM or full band 2 meter operation.

A14810S



A1483S



MODEL	13B2	17B2	124WB	26B2	A1483S	A14810S
Frequency, MHz	144-148	144-145	144-148	144-148	144-148	144-148
No. Elements	13	17	4	26	3	10
Forward Gain, dBi	15.8	18.0	10.2	18.8	7.8	13.2
Front to Back Ratio, dB	26	26	19	26		
SWR 1.2:1 Typical						
2:1 Bandwidth, MHz	>4	>2	4	>4	>5	≥4
Power Rating, Watts PEP	2000	2000	2000	2000	1000	1000
3 dB Beamwidth, Degrees						
E Plane	2 x 18	2 x 14.5	60	2x18	66	40
H Plane	2 x 19	2 x 15	88	2x9.5	108	46
Side Lobe Atten., dB, E Plane	>60	>60	40	>60		
Boom Length, ft (m)	15 (4.57)	31 (9.45)	4 (1.22)	15 (4.57)	2.8 (.85)	12 (3.6)
Electrical Wavelength	2.2	4.5	.5	2.2		
Longest Element, in (cm)	39.75 (101)	40.75 (103.5)	40.75 (104)	39.75 (101)	41 (104.1)	40.3 (102.4)
Turning Radius, ft (m)	8.9 (2.7)	17.25 (5.26)	4 (1.22)	10.4 (3.18)	2.8 (.8)	6 (1.8)
Mast Size Range, in (cm)	1.5-2	1.5-2	1.25-2	1.5-2	1.25-2	1.25-2
	(3.8-5.1)	(3.8-5.1)	(3.2-5.1)	(3.8-5.1)	(3.2-5.1)	(3.2-5.1)
Wind Load, ft ² (m ²)	1.8 (.17)	3.9 (.36)	.34 (.034)	4.84 (.45)	.27 (.02)	1.21 (.11)
Weight, lb (kg)	6.7 (.31)	15.75 (7.14)	3 (1.36)	21.5 (9.75)	1.5 (.7)	6 (2.7)



CUSHCRAFT
CORPORATION



70 CM, 1 1/4 M, 2 M

UHF/VHF YAGIS

A14820T 2 Meter Hi-Lo Cross Yagi

Here's the antenna that solves multi-mode problems! Ten vertically polarized and ten horizontally polarized elements provide 11.1 dBi gain covering 144-148 MHz. The horizontal elements handle your CW and SSB needs, while the vertical elements cover FM. Separate coax feeds allow polarization changes.

224WB

220 MHz Widebands

This 222 MHz 4 element beam is perfect for Packet, FM repeaters, or sideband/CW. It can be mounted for vertical or horizontal polarization.

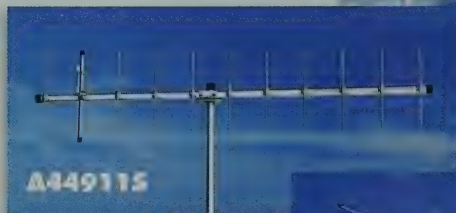
MODEL	224WB	A14820T
Frequency, MHz	222-225	144-148
No. Elements	4	10/10
Forward Gain, dBi	10.2	13
Front to Back Ratio, dB	24	24
SWR 1.2:1 Typical		
2:1 Bandwidth, MHz	>5	>4
Power Rating, Watts PEP	1500	1000
3dB Beamwidth, Degrees		
E Plane	60	45
H Plane	88	50
Side Lobe Attenuation, dB E Plane	40	40
Boom Length, ft (m)	3 (.91)	11(3.4)
Electrical Wavelength	0.5	1.6
Longest Element, in (cm)	26.7 (68)	40.6 (103)
Turning Radius, ft (m)	3 (.91)	7.5 (2.3)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-2 (3.2-5.1)
Wind Load, ft ² (m ²)	.23 (.021)	0.39(0.11)
Weight, lb (kg)	1.7 (.77)	7 (3.15)

MODEL	719B	A43011S	A4496S	A44911S
Frequency, MHz	430-450	430-440	440-450	440-450
No. Elements	19	11	6	11
Forward Gain, dBi	15.5	13.2	10.5	13.2
Front to Back Ratio, dB	25	20	18	20
SWR 1.2:1 Typical				
2:1 Bandwidth MHz	20	>10	>10	>10
Power Rating, Watts PEP	2000	350	350	350
3 dB Beamwidth, Degrees				
E Plane	24	48	60	48
H Plane	19			
Side Lobe Atten., dB, E Plane	60	40	30	40
Boom Length, ft (m)	13.5 (4.1)	4.6 (1.39)	2.9 (0.89)	4.4 (1.35)
Electrical Wavelength	6			
Longest Element, in (cm)	13.75 (34.9)	14 (35)	13 (33)	13 (33)
Turning Radius, ft (m)	7.25 (2.2)	2.8 (.85)	2.9 (.89)	2.8 (.85)
Mast Size Range, in (cm)	1.25-2 (3.2-5.1)	1.25-1.5 (3.2-5.1)	1.25-2.0 (3.2-5.1)	1.25-1.5 (3.2-5.1)
Wind Load, ft ² (m ²)	1.2 (.11)	0.42 (0.04)	0.30 (0.03)	0.39 (0.04)
Weight, lb (kg)	5.6 (2.55)	4 (1.8)	3 (1.4)	4 (1.8)



A4496S/A44911S

Use one of these 440 MHz beams for your FM/Packet needs. Both work great for vertical or horizontal polarization.



719B FM, CW and SSB 15.5 dBi

Looking for an antenna to enhance performance on all modes of the 70 CM band? The 13.5 foot long 719B is the right choice. Mount it vertical for FM or horizontal for CW and Sideband. The 719B joins the 2 meter 13B2 as a classic for improved performance.



CUSHCRAFT
CORPORATION

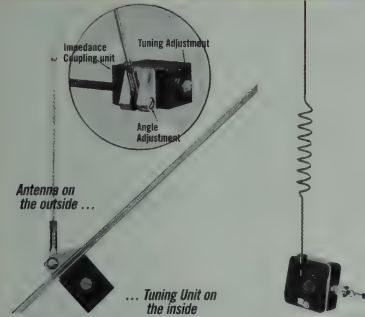
Lakeview Co., Inc.

WD4BUM HAMSTICKS® Two-Piece Monoband Mobile Antennas Hamstick 75 thru 10 meter models consist of a 47 inch long x 1/2 inch diameter fiberglass base section with the loading coil wound over its length and covered with black PVC shrink tubing. It's fitted on one end with a 3/8" X 24 brass base fitting that fits most amateur mobile mounts. A black 48 inch tempered stainless steel whip telescopes into the top of the base section and provides for frequency adjustment. The 6 meter model has a 34 inch base section and whip. Convenient frequency vs length graphs are included with the instructions.

If the antenna shows a SWR of 1.5 to 1 or better, no matching should be necessary. However, if it is, which may be especially true on 40 and 75m, you can capacitively match the base using values recommended in the instructions. If you frequently change bands you can use the **WD4BUM INDUCTI-MATCH (IM-1)** which consists of an impedance matching coil that simply installs at the base of the antenna. Using the supplied clip lead, you just tap up the coil for the best match.

- Models**
- | | | |
|--------------------|-------------------|-------------------|
| 9106 (6M) | 9110 (10M) | 9112 (12M) |
| 9115 (15M) | 9117 (17M) | 9120 (20M) |
| 9130 (30 M) | 9140 (40M) | 9175 (75M) |
- All Hamsticks each **\$24.99**
- 901** Dipole Mount for 2 Hamsticks **14.99**
- IM-1** Inducti-Match **17.99**
- TM-1** License Plate Mount 3/8" x 24... **44.99**
- TM-1 PLUS** License Plate Mount SO-239 connector..... **Closeout 34.99**

ANTENNA SPECIALISTS



"ON-GLASS™" MOBILE ANTENNAS

No holes to cut! The small tuning unit attaches to glass inside the vehicle and couples capacitively through the glass to the radiating element mounted on the outside. Installs with easily-removable adhesive. Includes adhesive, 15' coaxial cable with PL-259 connector • 50W • 144-174MHz (APR-151.3), 138-150MHz (APR143) • 6MHz, tunable bandwidth • Less than 1.5:1 VSWR • 50Ω nominal impedance • Electrical 1/2-wave radiator • Shunt fed, DC ground coupling unit • 33" (APR-151.3) 23" (APR143) stainless steel, black DURACOAT™ finish whip • 15' RG-58/U cable with PL-259

APR151.3 (left) 2m, on-glass, 33" high.... **\$69.99**

APR143 (right) 2m 23" cell look-alike..... **\$69.99**

PAR

OMNIDIRECTIONAL ANTENNAS

10/6/2M, 220, 440 MHz (fixed/mobile). Complement to high-gain directional arrays, allowing all-direction local work and monitoring. Outperform halos, loops and turnstiles! Longer than halfwave dipoles. Coupled with a unique shape, yield a horizontally-polarized antenna (pattern within 0.8dB of a circle, exhibits wide bandwidth). Rated at 150W, their built-in matchbox and current balun allow feeding with 52Ω coax. Virtually eliminates detuning due to moisture. Stackable for 3-6dB omni-directional gain and lower radiation angle.

OA-28 10m, 28-30MHz **\$74.99**

OA-50 6m, 49.5-54MHz **69.99**

OA-144 2m, 138-150MHz **54.99**

OA-222 222-224MHz..... **54.99**

OA-432 420-450MHz..... **54.99**

Stacking Harnesses for Two Belden 8213 and silver/gold/teflon connects, 70cm uses N-connectors.

SK-50 for OA-50 **\$36.99**

SK-144 for OA-144 **34.99**

SK-432 for OA-432, type-N **54.99**



SM-50 Stressed Moxon 6M Antenna Occupies approximately 1/2 the footprint of traditional two-element yagis, yet has nearly identical electrical specifications. The radiator material selection results in a further reduction in size and weight over classical Moxons. Once the coupling unit is installed onto the main radiator using two #10-32 screws, assembling the rest of the antenna, including mast mounting and tuning, requires no tools. Ideal for mountain topping, roving and stealth operation. • Horizontal polarity • Forward Gain: 5.8 dBi • F/B Ratio: 17 dB • Design Z: 50Ω unbalanced • V.S.W.R. BW: 1.5MHz between 1.5:1 points • 1kW power handling • 6061-T6 aluminum, fiberglass, genuine Flex Weave wire, stainless steel • Rectangular 84 x 31", 3lbs **\$79.99**



LA-350 Active Short-wave Loop Two 12" diameter interchangeable antenna elements cover 3.0 to 9.0 and 9.0 to 30MHz. Rotates to enhance reception and null unwanted interference. Built-in 13.5 dB gain amplifier and tuning control to peak performance. Supplied with two elements, AC adapter, instruction manual and 20 inch cable with BNC connector.....Milwaukee only **\$339.99**



Phantom® Whipless design! They don't look like antennas. Attract less attention, less vandalism and have lower wind resistance. Less susceptible to damage by trees, garages, etc. Requires NMO mount.

TRAB-1420 VHF Covers 142-164MHz (tunable), Black radome is 3.30 in. high. Unity gain. **\$59.99**

TRAB-4303 UHF Covers 430-450MHz. Black radome is 3.30" high. 3dB gain **\$29.99**

BB-1443 VHF Wideband Antenna Base loaded 5/8 wave. Covers 144-174 MHz, 3 dB gain, 49 in. tapered whip. Requires NMO mount. (Black) **\$39.99**

CWB-4405C UHF Wideband, Self Tuning Closed coil collinear. 440-470 MHz, 5dB gain, 32-1/8" tapered whip. Requires NMO mount. (Black) **\$49.99**

CWB-1443 VHF 5/8-Wave Broadband, Self Tuning 144-156MHz, 3.0 dB, 47" tapered whip. (Black).. **\$49.99**

BB-1442N Broadband, 5/8-Wave No Ground Plane Base loaded, 144-174 MHz, 2.4dB, 49" tapered whip. **\$39.99**

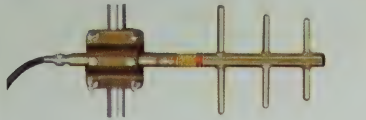
BB-4303 UHF 5/8-Wave Covers 430-450MHz, 3dB gain, 11.81" straight whip. Requires NMO mount. (Black) **\$34.99**

AB-FT Broadband 1/4-Wave Tunable 118-896 MHz, unity gain, NMO **\$16.99**

AB-SCANC Scanner Antenna Closed coil collinear for 150/450/800MHz receive only. Requires NMO mount. (Black) **\$29.99**

CB-144/440C Dualband VHF/UHF Closed coil, 36", collinear covers 144-148, 440-450MHz, 2.5dB, 200W. Requires NMO mount. (Black)..... **\$49.99**

GPS ANTENNA
GPSU-15GBNC GPS Antenna Low profile magnetic base GPS antenna with 14 ft. RG-174/U coax and BNC connector **\$99.99**



GOLD-ANODIZED, WELDED DIRECTIONAL YAGIS

Computer optimized and internally matched - wide bandwidth no tuning. End-of-boom N connector feed with an internal transmission line feeding the driven element.

Y-1363 3-Element VHF Covers 136-150MHz, 7.1 dBd, 17 dBd front-to-back ratio. Rated for 500W. Mounts on mast up to 2" diameter **\$119.99**

Y-4303 3-Element UHF Covers 430-450MHz, 7.1 dBd gain, 17 dB front-to-back ratio. Rated for 300W. Mounts on mast up to 1-5/8" diameter **\$99.99**

DIAMOND ANTENNAS

The Standard By Which All Others Are Judged.

Acclaimed as the technological leader in single & multiband antennas

- Wide-band Performance • Factory Adjusted—No Tuning Required • Highest Gain
- UPS Shippable • High Wind Rating • Fiberglass Radome • DC Grounded • Stainless Hardware

X500HA (UHF-Conn.) X500HNA (Type-N Conn.) Ruggedized Base/Repeater Antenna

X50NA

The X50NA is an excellent choice where ruggedness is required in a medium-gain, dual-band, base/repeater application.

Features

- Wide frequency bandwidth
- Heavy duty fiberglass radome
- Stainless steel mounting hardware and radials
- Type-N Cable connection
- Compact size for easy mounting/installation

Specifications:

Freq: 2m: 144-148MHz
70cm: 440-450MHz
Gain: 2m: 4.5dB; 70cm: 7.2 dB
Power: 200 watts
Wind Rating: 135 MPH (no ice)
Height: 5.6 feet

X500HNA

Diamond Antenna's best base station repeater antenna. Designed for strength and performance, the X500HNA is pretuned to achieve maximum gain in both the 2m and 70cm amateur bands.

Features

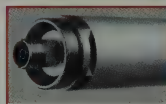
- Heavy duty fiberglass radome
- Overlapping outer shells for added strength
- Stainless steel mounting hardware and radials
- Strong, waterproof joint couplings
- Type-N Cable connection
- Wide band performance

Specifications:

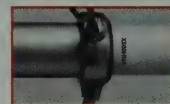
Freq: 2m: 144-148MHz 70cm: 440-450MHz
Gain: 2m: 8.3dB; 70cm: 11.7 dB
Power: 200 watts
Wind Rating: 90 MPH (no ice)
Height: 17.8 feet



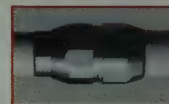
X50NA X500HNA



COAX CONNECTION
AT BASE END



HEAVY DUTY BASE/
RADIAL ASSEMBLY



STRONG JOINT
COUPLINGS

DIAMOND Mono-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
CP22E ¹	144	6.5	200	UHF	9.0	70
DPGH62 ¹	50	6.0	200	UHF	21.0	78
F22A	144	6.7	200	UHF	10.5	112
F23A	144	7.8	200	UHF	15.0	90
F718A	440	11.5	250	N	15.0	90
G200	2.4GHz	11 dBi	—	N	4.8	135

DIAMOND Dual-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
X50A	144/440	4.5/7.2	200	UHF	5.6	135
X50NA	144/440	4.5/7.2	200	N	5.6	135
X200A	144/440	6.0/8.0	200	UHF	8.3	112
X510NA ²	144/440	8.3/11.7	200	N	17.2	90
X510MA	144/440	8.3/11.7	200	UHF	17.2	90
X500HNA	144/440	8.3/11.7	200	N	17.8	90+
X700HNA	144/440	9.3/13.0	200	N	24.0	90
U200	440/1240	8.3/11.7	100	N	5.9	135

DIAMOND Tri-Band Base/Repeater Antennas

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. FT.	RATED WIND MPH (No. Ice)
V2000A ^{3,5}	52/144/440	2.1/6.2/8.4	150	UHF	8.3	110
X3200A ⁴	146/222/440	6.0/7.8/8.0	100/200	UHF	10.5	112
X6000A	144/440/1240	6.5/9.0/10.0	100/60	N	10.5	112

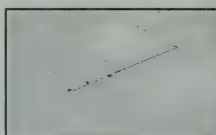
DIAMOND Yagi Antennas

Most requirement: 1.4"-2.4"

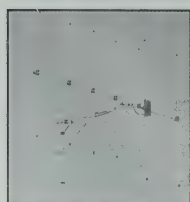
MODEL	BAND (MHz)	GAIN (dBi)	WATTS (PEP)	CONN.	BOOM LNTH.	ELEMENT PHASING
A502HB	50	6.3	400	UHF	2.6'	2 element
A504HB	50	10.8	400	UHF	10.7'	4 element
A144S5	144	9	100	UHF	37.5"	5 element
A430S10	432	13	100	UHF	43"	10 element
A430S15	432	14.8	100	UHF	89"	15 element



A502HB



A504HB



A144S5

NOTES:

- ¹ Heavy duty aluminum construction.
- ² X510NJ: 144-147/430-440MHz.
- ³ 1/4", rated in dBi.
- ⁴ 2m: 146-148; 100 watts
- ⁵ 52-54MHz only

BAND: 144=144-148MHz, 222=222-225MHz, 420=420-430MHz, 430=430-440MHz, 440=440-450MHz, 1240=1240-1300MHz.

DIAMOND'S STATE-OF-THE-ART

VHF/UHF And HF/VHF Mobile Antennas—
Maximum Performance Without Compromise

You've seen the rest...now own the BEST!

DIAMOND
ANTENNA

HV7A Mobile Antenna System For New HF/VHF transceivers

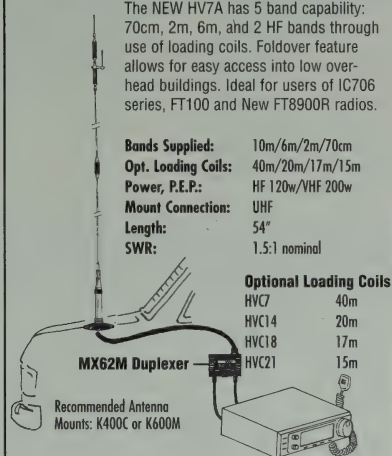
(Such as: IC706 series, FT100 & NEW FT8900R)

The NEW HV7A has 5 band capability: 70cm, 2m, 6m, and 2 HF bands through use of loading coils. Foldover feature allows for easy access into low over-head buildings. Ideal for users of IC706 series, FT100 and New FT8900R radios.

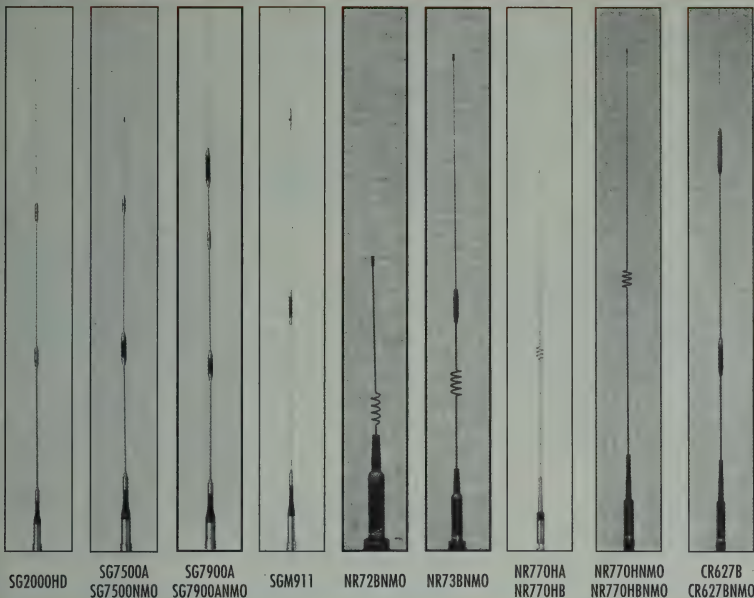
Bands Supplied: 10m/6m/2m/70cm
Opt. Loading Coils: 40m/20m/17m/15m
Power, P.E.P.: HF 120w/VHF 200w
Mount Connection: UHF
Length: 54"
SWR: 1.5:1 nominal

Optional Loading Coils

HVC7 40m
HVC14 20m
HVC18 17m
HVC21 15m



Recommended Antenna
Mounts: K400C or K600M



SG2000HD SG7500A SG7900A SGM911 NR72BNMO NR73BNMO NR770HA NR770HNM CR627B NR770HNM CR627BNMO

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
MR77	2m/70cm	2.15/3.4	70	MAG	20	1/4λ, 1/2λ
MR77SMA	2m/70cm	2.15/3.4	70	MAG	20	1/4λ, 1/2λ
NR72BNMO ⁶	2m/70cm	2.15	100	NMO	13.8	1/4λ, 1/2λ
NR73BNMO	2m/70cm	2.15/5.3	100	NMO	33.5	1/2λ, 1-5/8λ
NR770HA ⁷	2m/70cm	3.0/5.5	200	UHF	40.2	1/2λ, 2-5/8λ
NR770HNM ⁸	2m/70cm	3.0/5.5	200	NMO	38.2	1/2λ, 2-5/8λ
NR770RA	2m/70cm	3.0/5.5	200	UHF	38.6	1/2λ, 2-5/8λ
NR7900A [*]	2m/70cm	3.7/6.4	300/250	UHF	57	1/4+1/2λ, 3-5/8λ
SG7000A ⁶	2m/70cm	2.15/3.8	100	UHF	18.5	1/4λ, 6/8λ
SG7500A	2m/70cm	3.5/6.0	150	UHF	40.6	1/2λ, 2-5/8λ
SG7500NMO	2m/70cm	3.5/6.0	150	NMO	41.0	1/2λ, 2-5/8λ
SG7900A [*]	2m/70cm	5.0/7.6	150	UHF	62.2	7/8λ, 3-5/8λ
SG7900ANMO [*]	2m/70cm	5.0/7.6	150	NMO	62	7/8λ, 3-5/8λ
SGM510	2m/70cm	2.15/5.5	100	UHF	37	1/2λ, 2-5/8λ

MODEL	BAND (MHz)	GAIN (dB)	WATTS	CONN.	HT. IN.	ELEMENT PHASING
CR8900A ^{6, 11}	10m/6m/2m/70cm	2.1 (2m) 5.5 (70cm)	60	UHF	50	1/4λ, 1/4λ 1/2λ, 2-5/8λ
SG2000HD [*]	2m	5.2	250	UHF	62.6	1/2λ+3/8λ
CR320A ⁶	2m/1-1/4m/70cm	2.15/3.8 5.5	200/100 200	UHF	37.4	1/4λ, 1/2λ 2-5/8λ
CR627B ^{6, 9} CR627BNMO ^{6, 9}	6m/2m/70cm	2.1/4.5 7.2	120	UHF/NMO	60	1/4λ, 1/2+1/4λ 2-5/8λ
HF6FX ⁶	6m	2 dBi	250	UHF	40	1/4λ
HF50CX ⁶	6m	3.5 dBi	200	UHF	75	3/8λ
NR22L [*]	2m	6.5	100	UHF	96.8	2-5/8λ
NR2000NA	2m/70cm/23cm	3.15/6.3/9.7	100	N	39	1/2λ, 2-5/8λ 5-5/8λ
M285 ¹⁰	2m	3.4	200	UHF	52.4	5/8λ
M685 ⁶	6m	2.15 dBi	200	UHF	52.4	1/4λ
MG200	2.4GHz	7 dBi	-	N	23.6	3-1/2λ
SGM911 ^{6, 9}	6m/2m/70cm	2.15/3/5.8	60	UHF	41	1/4λ, 1/2λ, 2-5/8λ
NR124	23cm	8.4	100	N	25	4-5/8λ

FOLD-OVER

Patented One-Touch Fold-Over Feature.
(Not available on M285, M685, MG200, MR77,
MR77SMA, NR72BNMO & NR73BNMO)

^{*} Not recommended for Magnet Mount

⁶ Grounding required

⁷ NR770HB same specs but in black finish.

⁸ NR770HBNMO same specs but in black finish.

⁹ 52-54MHz only

¹⁰ Tunable from 140-174MHz

¹¹ FM only

1/4λ, rated in dBi.

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
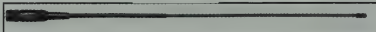

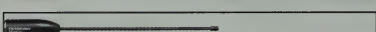
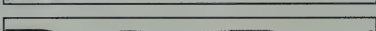
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DIAMOND Antenna Accessories

High Efficiency HT & Scanner Antennas HF Multiband Vertical Antenna Duplexers & Triplexers Dummy Loads & Coaxial Switches

RH and SRH Series

High quality, high gain HT antennas for mono, dual, and tri-band handheld radios. Available in both BNC and SMA connections. Increase the performance on your handheld or wideband scanner with a Diamond RH or SRH Series antenna.

RH3		SRH805		SMA
RH77CA				
RH951S				
SRH519 & SRH815				SMA
SRH999				SMA

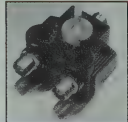
MODEL	DESCRIPTION	RELATIVE GAIN*
RH3	2m/70cm dual band "Black Bullet" HT antenna. 1.75" BNC. 120 to 900 receive	-2 dB
RH77CA	High gain 2m/70cm dual band HT antenna. Receive range to 900 MHz. BNC.	+6 dB
RH205	2m HT antenna, telescopic, 5/8λ fully extended, 47.5"; 1/4λ retracted, 9"	+9 dB
RH519	2m/70cm slim dual-band HT antenna. Flexible. 8" BNC, 10 watts.	+3 dB
RH707	2m/70cm dual-band -tiltable whip - HT antenna. 8 1/4" BNC.	+3 dB
RH951S	High gain 2m/70cm/23cm slim tri-band HT antenna. Flexible. BNC (Wide band receive)+6 dB	
SRH77CA	High gain 2m/70cm dual band flexible HT antenna. 15" SMA, 10 watts.	+6 dB
SRH320A	2m/1-1/4m/70cm tri-band HT antenna. Flexible. SMA. 10 watts.	+3dB
SRH519	2m/70cm dual-band HT antenna. Flexible. 8" SMA, 10 watts.	+3 dB
SRH805	2m/70cm/23cm tri-band HT antenna. 1.75" SMA, 10 watts.	-2 dB
SRH815	2m/70cm/23cm tri-band HT antenna. Flexible. 6" SMA, 6 watts.	+3dB
SRH999	6m/2m/70cm/23cm quad-band HT antenna. Flexible. 19.5" SMA, 10 watts.	+3dB

*Rated against typical stock HT antennas.

DL30A/DL30N



CX210A/CX210N



CX310A

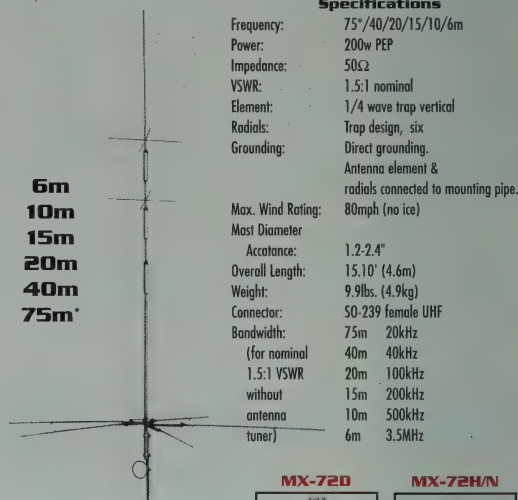


MODEL	DESCRIPTION
CA23RS	Lightning surge protector, DC-2500 MHz, 200W Type-N (F)
CA23RW	Lightning surge protector, DC-2500 MHz, 200W Type-N (F) Waterproof.
CX210A	Heavy duty wideband coax switch, DC-1000 MHz. 1.5 kW, SO-239
CX210N	Heavy duty wideband coax switch, DC-1500 MHz. 1.5 kW, Type N
CX310A	Heavy duty wideband coax switch, 3 position, DC-800MHz, SO-239
DL30A	Dummy load, DC-500 MHz. 15w average/100w peak. PL-259
DL30N	Dummy load, DC-500MHz. 15w average/100w peak. Type N

CP6A HF MULTIBAND VERTICAL

The New CP6A multi-band trap-vertical antenna for HF bands, covering the 75*, 40, 20, 15, 10 and 6m amateur bands. Made from heavy-duty aluminum, the CP6A assembles easily, yields excellent performance and reliability from a compact base station antenna. Its compact size allows for many mounting options. Minimum 15 feet diameter required for mounting radials. No additional ground radials required. Mounting hardware included.

*75m requires a tuner.






MX-72D



MX-72H/N



Duplexers/Triplexers

MODEL	MX72D	MX72H	MX72N	MX2000			MX62M	
FREQUENCY BAND (MHz)	LPF 1.6-30	140-150	HPF 400-460	LPF 1.6-60	BPF 110-170	HPF 300-950	LPF 1.6-56	HPF 76-470
PWR CW (ICAS) WATTS P.E.P.	400 1000	150 400	100 250	800 800	800 500		600	
THRU LOSS/DB	0.15	0.15	0.25	0.15	0.2	0.25	0.2	0.3
ISOL	60dB			60dB			50dB	
VSWR	1.2:1			1.2:1			1.2:1	
CONNECTOR COMPLEMENT								
CONNECTOR	Direct			12" Cable w/Connectors			12" Cable w/Connectors	

DIAMOND'S Premium Antenna Mounts & Cable Assemblies

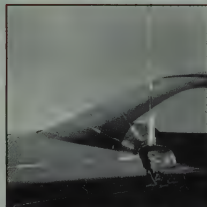
Designed for today's high performance antennas

K9000

Motorized Mount

Raise and lower your antenna with a touch of a button. Vertical adjustment 0-9°. Accepts "ground independent" antennas up to 45". Recommended antennas: SG7500NMO, NR73BNMO, SG7500A, NR2C and NR770 series.

K9000TM Trunk/Hatchback Mount
K9000LRM Luggage Rack Mount



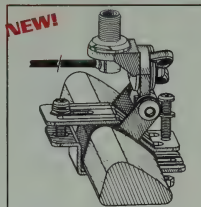
* Use C-Series cable assemblies.

K515

Universal Luggage Rack Mount

Ideal for new SUV luggage racks; accepts 3/4" to 2-1/4" in height and up to 2-1/4" wide. Two axis adjustable mount for light-weight VHF/UHF antennas under 45", not requiring RF ground.

K515S SO-239 base, 13.5' coax & SMA
K515SNMO NMO base, 13.5' coax & SMA



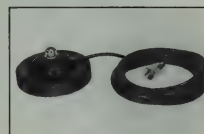
* Includes SMA to UHF adapter.



K702M

Magnet Mount Base

Deluxe low profile magnet mount with high holding power. Aerodynamic styling, large 6 3/8" dia., 3/4" h. For VHF/UHF antennas up to 50" h. Includes thin mylar protective sheet to enhance grip and protect paint. Cable: 13' RG58A/U & PL-259.



* Includes SMA to UHF adapter.

K600

Variable Angle Trunk Mount

Deluxe aerodynamic trunk mount. Vertical adjustment 0-9°. 4" wide mounting base with 4 set screws for maximum strength. Recommended for high gain VHF/UHF antennas.

K600M SO-239 base, 16.5' coax & PL-259
K600S SO-239 base, 13.5' coax & SMA



K550

Luggage Rack Mount

Adjustable luggage rack mount for new mini vans. Recommended for antennas under 45".

K550KM SO-239 base, 13' coax & PL-259
K550 Mount Only

K400

Heavy Duty Hatchback/Door/Truck Lid Mount

Diamond's deluxe heavy duty mount. Two-axis adjustable. 4" wide mounting base with 4 set screws for maximum strength. Recommended for high gain VHF/UHF antennas.

K400C SO-239 base, 6.5' coax & PL-259
K400CNMO NMO base, 6.5' coax & PL-259
K400-3/8C 3/8x24 base, 6.5' coax & PL-259
K400S SO-239 base, 13.5' coax & SMA
K400SNMO NMO base, 13.5' coax & SMA



* Use C110 for front radio installations.

* Includes SMA to UHF adapter.

K412

Deluxe Hatchback/Door/Trunk Lid Mount

Two-axis adjustable mount for light weight antennas. 1.5 inch mounting width. Ideal for tight mounting options. Recommended for antennas under 45".

K412C SO-239 base, 6.5' coax & PL-259
K412CNMO NMO base, 6.5' coax & PL-259
K412S SO-239 base, 13.5' coax & SMA
K412SNMO NMO base, 13.5' coax & SMA



* Use C110 for front radio installations.

* Includes SMA to UHF adapter.

SPM35

Magnet Mount Base

Heavy duty 2.2 lb./4" magnet mount rated 25-500 MHz. Cable: 13' coax & PL-259. Recommended for antennas under 45".

SPM-NMO

Magnet Mount Base

Similar to the SPM35, but has NMO mount.

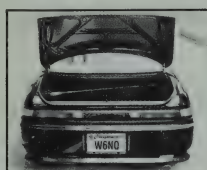


K601

Hide-Away Mount

Folds antenna safely into trunk. Fully adjustable, fits most vehicles. Recommended antennas: NR2C, NR73BNMO, NR770HNM, NR770HB, NR770RA, SG7500A, SG7500NMO and SGM510.

K601M SO-239 base, 6.5' coax & PL-259
K601NMO NMO Base, 6.5' coax & PL-259



* Use C110 for front radio installations.

C-SERIES CABLE ASSEMBLIES



C101

SO-239 base, 6.5' RG316 Teflon coax & PL-259. Ideal cable assembly for trunk mount radios.

C101NMO

Same as C101 with NMO base. For Diamond's K-Series mounts.

C213

Same as C101, 13.5' length.

C213NMO

Same as C101NMO, 13.5' length.



C110

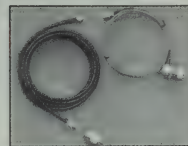
Extension for C101. 10' RG8X coax w/mini UHF Conn. Use C110 to extend cable for front radio installations.

C110BNC

10' assembly similar to above, uses RG316 Teflon coax terminating in BNC-male.

C110SMA

Similar to C110BNC, terminating in SMA male.



C211

SO-239 base, 16.5' cable assembly & PL-259. Combination of C101 & C110.

C104SMA

4' extension cable for HT's with SMA connector. For existing cable assemblies with PL-259. UHF female (SO-239) to right angle SMA male.

C105SMA

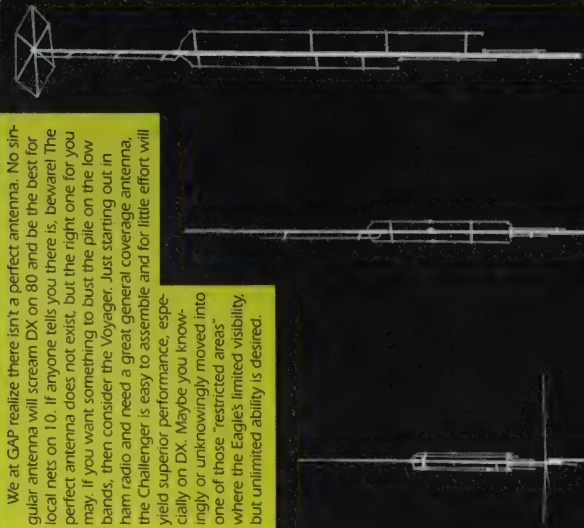
5' extension cable for C101. RG58/U cable, terminating in right angle SMA male.

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GAP: THE PERFECT ANTENNA

We at GAP realize there isn't a perfect antenna. No singular antenna will scream DX on 80 and be the best for local nets on 10. If anyone tells you there is, beware! The perfect antenna does not exist, but the right one for you may. If you want something to bust the pile on the low bands, then consider the Voyager. Just starting out in ham radio and need a great general coverage antenna, the Challenger is easy to assemble and for little effort will yield superior performance, especially on DX. Maybe you know, or unknowingly moved into one of those "restricted areas" where the Eagles' limited visibility, but unlimited ability is desired.



Eagle DX

Challenger DX

Voyager DX

This chart helps you select the right GAP antenna. When comparing GAP's bandwidth is not a concern. With few exceptions, a GAP yields continuous coverage under 2:1 for the ENTIRE BAND.

All antennas utilize a GAP elevated asymmetric feed. A major benefit is the virtual elimination of the earth loss, so more RF radiates into the air instead of the ground. This feed is why a GAP requires NO RADIALS. Just as elevating a GAP offers no significant improvement to its performance, adding radials won't either, making set up a breeze.

A GAP antenna has no traps, coils or transformers. This is important. The greatest sources of failure in multiband antennas are these devices. Perhaps you heard someone discuss a trap that had melted, arced or became full of water. Improvements to these inherent problems are the focus of the antenna manufacturer, while the basic design of the antenna remains unchanged. GAP improved the trap by eliminating it! Removing these devices means they don't have to be tuned and, more importantly, won't be detuned by the first ice or rain. The absence of these devices improves antenna reliability, stability and increases bandwidth.

Another major advantage to a GAP antenna is its NO tune feature. Screws are simply inserted into predrilled holes with a supplied nutdriver.

The secret is out and people in the know say:

CQ—The GAP consistently outperformed base-fed antennas...and was quieter."

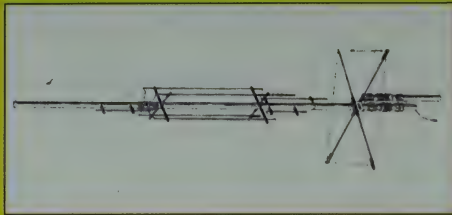
73—This is a real DX antenna, much quieter than other verticals."

RF—To say this antenna is effective would be a real understatement. Switching back and forth on 40m between another multiband HF vertical and the GAP there was no comparison. Signals were always stronger on the GAP, sometimes by 5 units, not just DBs."

Worldradio—These guys have solved the problem associated with verticals. That is, an awful lot of RF is wallowing around and dropping into the dirt instead of going outward bound. A half-wave vertical does need radials if it is end fed (at the bottom). But the same half-wave vertical does not (as much, hardly at all) if it is fed in the center."

IEEE—"Near field and power density analyses show another advantage of this antenna (asymmetric vertical dipole): it decreases the power density close to the ground, and so avoids power dissipation in the soil below it. The input impedance is very stable and almost independent of ground conductivity. This antenna can operate with high radiation efficiency in the MF AM standard broadcast band, without the classical buried ground plane, so as to yield easier installation and maintenance."

Latest Release: **TITAN DX**



This all purpose antenna is designed to operate 10m-80m. WARC bands included. It sits on a 1-1/4" pipe and can be mounted close to the ground or up on a roof. Its bandwidth and no tune feature make it an ideal antenna for the limited space environment as well as a terrific addition to the antenna farm.

GAP

**ANTENNA
PRODUCTS, INC.**

99 N. Willow Street
Fellsmeere, FL 32948

tel: (772)-571-9922

web: gapantenna.com

TO ORDER, CALL AES...

1-800-558-0411

MODEL	BANDS OF OPERATION										HT	WT	MOUNT	COUNTER- POISE
	2m	6m	10m	12m	15m	17m	20m	30m	40m	80m				
Challenger DX	■	■	■	■	■	■	■	■	■	■	31.5'	21 lbs	Drop In Ground Mount	3 Wires @ 25'
Eagle DX			■	■	■	■	■	■	■	■	21.5'	19 lbs	1-1/4" pipe	80" Rigid
Titan DX			■	■	■	■	■	■	■	■	25'	25 lbs	1-1/4" pipe	80" Rigid
Voyager DX							■		■	■	45'	39 lbs	Hinged Base	3 Wires @ 57'

See Price List for GAP Quick-Tilt Mounts, Counterpoise and Guy Kit Prices



Model G3-144

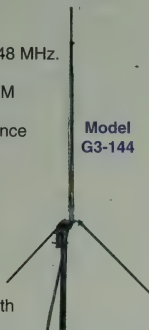
The G3-144 is the newest addition to the Hustler Base Station line. Designed with the cost conscious amateur in mind, this small, inexpensive antenna delivers more gain than other antennas in its price range. Ideal for a home or emergency command post

ELECTRICAL

- Frequency Range: 144-148 MHz.
- Gain: 3 dB
- Maximum Power: 1 KW FM
- Bandwidth: 4 MHz
- VSWR: < 1.5:1 @ resonance
- Impedance: 50 ohms

MECHANICAL

- Termination: SO-239
- Length: 7' 5"
- Weight: 2.0 lbs
- Wind Survival: 100 mph.
- Wind Area: 0.5 ft.²
- Mounting: 1 to 1 3/4"
- Construction: High strength fiberglass & aluminum.



Model G3-144

Model G6-270R

Dual band 2 Meter & 440 MHz

ELECTRICAL

- Frequency range: 144-148 MHz, 435-455 MHz.
- Gain: 6 dB
- Maximum power: 100 Watts
- Bandwidth: 4 MHz – 2 Meters 10 MHz – 440 Meters
- VSWR: < 1.5:1 @ resonance
- Impedance: 50 ohms

MECHANICAL

- Termination: N female
- Length: 7' 6"
- Weight: 5.3 lbs.
- Wind Survival: 100 mph
- Wind Area: 1.4 ft.²
- Mounting: Up to 1 3/4"
- Construction: one piece radome



G6-270R

Model G6-440

(see photo above)

ELECTRICAL

- Frequency range: 440 - 450 MHz.
- Gain: 6 dB
- Maximum power: 1 KW FM
- Bandwidth: 10 MHz.
- VSWR: < 1.5:1 @ resonance
- Impedance: 50 ohms

MECHANICAL

- Termination: Type N female
- Length: 7' 3"
- Weight: 5.0 lbs.
- Wind survival: 100 mph.
- Wind Area: 1.4 ft.²
- Mounting: Up to 1 3/4"
- Construction: one piece radome

VHF and UHF Omni Directional Fixed Station Vertical Antennas

Model G7-144

Two Meter

The G7-144 is totally self supporting and is easily assembled. When disassembled the longest part is approximately 4' which makes it easy to handle and ship via UPS.

ELECTRICAL

- Frequency Range: 144 - 148 MHz.
- Gain: 7 dB
- Maximum Power: 1 KW FM
- Bandwidth: 4 MHz.
- VSWR: < 1.5:1 @ resonance

- Impedance: 50 ohms

MECHANICAL

- Termination: N female
- Length: 15' 4"
- Weight: 10.0 lbs.
- Wind survival: 100 mph
- Wind Area: 0.96 ft.²
- Mounting: Up to 1 3/4"
- Construction: High strength fiberglass & aluminum.



Model G6-144B

Two Meter

(see photo above)

ELECTRICAL

- Frequency range: 143 - 149 MHz.
- Gain: 6 dB
- Maximum power: 1 KW FM
- Bandwidth: 6 MHz.
- VSWR: < 1.5:1 @ resonance
- Impedance: 50 ohms

MECHANICAL

- Termination: SO-239
- Length: 9' 9"
- Weight: 6.8 lbs.
- Wind survival: 100 mph.
- Wind Area: 1.4 ft.²
- Mounting: Up to 1 3/4"
- Construction: High strength fiberglass & aluminum.

Model G7-220

(see photo above)

ELECTRICAL

- Frequency range: 220 - 225 MHz.
- Gain: 7 dB
- Maximum power: 1 KW FM
- Bandwidth: 5 MHz.
- VSWR: < 1.5:1 @ resonance
- Impedance: 50 ohms

MECHANICAL

- Termination: Type N female
- Length: 10' 2"
- Weight: 7.0 lbs.
- Wind survival: 100 mph.
- Wind Area: 0.96 ft.²
- Mounting: Up to 1 3/4"
- Construction: High strength fiberglass & aluminum.

Fixed Station

Multi-Band

HF Vertical Antennas

Our exclusive trap design offers the lowest loss possible. A special extrusion process allows us to produce trap covers to an otherwise unattainable close tolerance, assuring accurate and permanent resonance. Our highly accurate traps provide top signal reports and consistent contacts.

Accurate tuning is made possible by the wide range of tuning flexibility designed into our verticals. Not only can you use the normal adjustable tubing to change resonance, but the traps themselves can be field tuned for an additional 2 MHz. shift. This flexibility will enable you to achieve a good S.W.R. even if your installation is not ideal.

- Broadbanded – low VSWR at band edges
- Power capability – full legal limit on SSB or CW
- Solid one inch fiberglass trap forms for optimum electrical and mechanical stability
- Heavy wall, high strength aluminum tubing, heavy duty aluminum mounting bracket and low loss, high strength insulators.
- Stainless steel clamps and hardware.
- Easy assembly and tuning.
- Single line feed with any length of 50 ohm coax.
- Use as ground mount with or without radials, or elevated mount with radials.
- All of the BTVs can be mounted in a piece of PVC and disguised as a flagpole in deed restricted neighborhoods.

Model 6-BTV

Bands 10-15-20-30-40 & 75 or 80 meters
Length/weight 24 ft. / 16.5 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. On 75 or 80 meters)

Model 5-BTV

Bands 10-15-20-40 & 75 or 80 meters
Length/weight 25 ft. / 16.5 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 29 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 2:1 or better at band edges on 10-40 meters (100 KHz. On 75 or 80 meters)

Model 4-BTV

Bands 10-15-20-40 meters
Length/weight 21 ft. 5 in. / 15 lbs.
Mounting Vertical support up to 1.75" O.D.
Wind Load 28 lbs. @ 70 mph.
Power capability Full legal limit SSB/CW
VSWR at resonance 1.15 to 1 or better
Bandwidth VSWR 1.6:1 at band edges

Model 30-MTK

30 meter add on kit for the 4 and 5 BTV

The Spirit Series

Hustler's omnidirectional, collinear design base station antennas are enclosed in a rugged fiberglass radome that will help minimize pattern variations due to high winds or extreme conditions. We offer these antennas in 144, 220, 440, 900 MHz and 1.2 Ghz. The gain will be unity, 3.6, 9, or 12 dB depending on the frequency. Custom frequencies available, call AES for a quote.

www.new-tronics.com

New-Tronics Antenna Corporation
One New-Tronics Place
Mineral Wells, Texas 76067-9563

Phone: 940.325.1386
Toll Free: 877.994.9499
Fax: 940.328.1409

Unity Gain

THF

VHF/UHF Trunk Lip Mount Antennas.

- Frequency range: 140-500 MHz
- ¼ wave length
- Cut length for low VSWR
- 15 ft RG58/U with PL-259 connector



UHT-1

VHF/UHF Roof/Deck Hole Mount Antenna.

- Frequency range: 140-500 MHz
- ¼ wave length
- Cut length for low VSWR
- 15 ft RG58/U



UGM

VHF/UHF Magnetic Mount Antenna

Extend the range of handheld or portable radios. Trimmable 17-7 PH stainless steel radiator is cut to ¼ wavelength for low SWR and unity gain from 140 to 500 MHz. Trim chart included.

Highly efficient mylar

protected magnetic mount attaches conveniently to magnetic compatible surfaces. No drilling! Supplied ready for operation with 10 ft. of mini-coax with BNC connector



MKR-2 Radial Kit

Used to convert RX, SF & CG series coils to fixed station operation. Mount can accept any 3/8"x24 threaded coil and contains three radials



Collinear

Series Fed Mobile Antennas

SF-2 144 MHz 3.4 dB

SF-220 220 MHz 3.4 dB

- Power rating: 100 watts

• 3/8" x 24 thread

• 5/8 wave

RX-2 144 MHz 3.4 dB

RX-220 220 MHz 3.4 dB

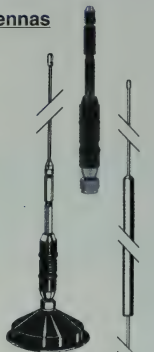
RX-440 440 MHz 5.0 dB

- Coil same as above

• 3 oz magnet

• 15 ft RG-58/U coax

• PL-259 connector



Collinear High Gain

Mobile Antenna

CG-144 5.2 dB 6 MHz

Bandwidth

CG-220 5.2 dB 4 MHz Bandwidth

- Power rating: 200 watts

• 3/8"x24 thread

• 5/8 over ¼ wave

• Collinear design

CGT-144 5.2 dB 6 MHz Bandwidth

CGT-220 5.2 dB 4 MHz Bandwidth

- Coil same as above

• Swivel ball for vertical positioning

• Quick disconnect for easy removal

• Trunk mount base

• 17 ft RG58/U coax

• PL-259 connector



VHF and UHF Mobile Antennas

MX Series NMO Magnetic Mount Antenna

MX-2 144 MHz 3.4 dB

MX-220 220 MHz 5.0 dB

MX-440 440 MHz 5.0 dB

- Power rating: 200 watts

• Chrome top

• NMO style coil

• 10 oz magnet

• 17 ft RG58/U coax &

PL-259 connector

MX-2B 144 MHz 3.4 dB

MX-440B 440 MHz 5.0 dB

- Same as above but all black coil



BBG Series NMO Swivel Ball

& Spring Antenna

BBG-144 3.4 dB

BBG-440-5 5.0 dB

- Power rating: 200 watts

• NMO style coil

• Chrome top, swivel ball and spring

BBGT-144 3.4 dB

BBGT-440-5 5.0 dB

- Same coil as above

• Includes Trunk mount

- 17 ft RG58/U coax & PL-259 connector



Dual Band 2 meter/ 70cm

Mobile Antennas

Hustler's new Dual Band antennas are designed to perform even in the toughest environments. Base coils are ultrasonically welded to ensure mechanical integrity and durability.

LMC-270

- 2.4 dB/4.0 dB gain

• Power rating: 100 watts

• NMO style coil

• Coil and whip only

MX-270

- 2.4 dB/4.0 dB gain

• Power rating: 100 watts

• NMO style magnetic mount

• 17 ft RG58/U coax &

PL-259 connector



LM Series NMO Coils

LMG, LMC and LMB Antennas are coil & whip only and require an NMO mount.

LMG-144 3.4 dB gain

LMG-440-5 5.0 dB gain

- Power rating: 200 watts

• NMO style coil

• Chrome top and bottom

• Contact-silver plated push pin

LMC-144 3.4 dB gain

LMC-440-5 5.0 dB gain

- Power rating: 200 watts

• NMO style coil

• Black coil with chrome top

LMB-144 3.4 dB gain

LMB-440-5 5.0 dB gain

- Power rating: 200 watts

• NMO style coil

- Black coil

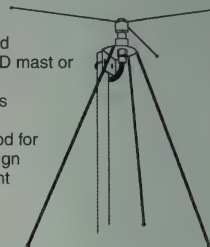


Scanner Base Station Antenna

Hear more at a greater distance with Hustler's external omnidirectional scanner antennas.

DCX

- 40 – 950 MHz
- Vertically polarized
- Mounts to 1 ¼" OD mast or flat surface
- 55" cone elements
- 20" disc elements
- Solid aluminum rod for high strength design
- Hardware & mount included



DCL

- Same as DCX
- 50 ft RG58/U coax with PL-259 on one end and BNC or Pin plug on the other end

Mobile Scanner Antenna

Hear all of the action in your car. Covers 30-50, 148-174, 430-450, 800-950 MHz

MRM

- 3 oz Magnet mount
- 12 ft RG58/U coax
- Available with BNC or Pin plug connector

MOT

- Trunk mount
- 15 ft RG58/U coax
- Available with BNC or Pin plug connector

MOR

- ¾" Roof or deck mount
- 12 ft RG58/U coax
- Available with BNC or Pin plug connector



New-Tronics Antenna Corporation

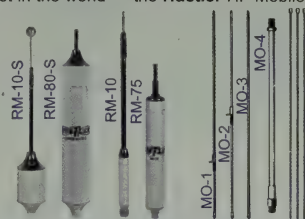
One New-Tronics Place
Mineral Wells, Texas 76067-9563

Phone: 940.325.1386
Toll Free: 877.994.9499
Fax: 940.328.1409

Amateur HF Mobile 10,12,15,17,20,30,40,60,75 and 80 Meter

If you are serious about HF mobile operation the **Hustler** HF Mobile System is the obvious choice. **Hustler** manufactures and sells more HF mobile antennas world wide than anyone. No other manufacturer offers the convenience, the flexibility or the pure performance that **Hustler** does. Our HF Mobile System offers a wide variety of components which enable you to customize your installation to fit your present and future needs. A choice of four different support masts provides an installation solution for every vehicle. A selection of eighteen interchangeable resonators in high and moderate power levels and varying bandwidths are available. A full complement of accessories such as springs, a multiband adapter and a quick disconnect device complete the system. Experience the satisfaction that comes with owning the best in the world — the **Hustler** HF Mobile System.

	Model	Band	Power SSB	Bandwidth 2:1 SWR	Weight lbs
RM-6	Standard	6 m	400 W	150-250 KHz	0.41
RM-10	Standard	10 m	400 W	150-250 KHz	0.41
RM-11	Standard	11 m	400 W	150-250 KHz	0.41
RM-12	Standard	12 m	400 W	90-120 KHz	0.41
RM-15	Standard	15 m	400 W	100-150 KHz	0.42
RM-17	Standard	17 m	400 W	120-150 KHz	0.44
RM-20	Standard	20 m	400 W	80-100 KHz	0.46
RM-30	Standard	30 m	400 W	50-60 KHz	0.84
RM-40	Standard	40 m	400 W	40-50 KHz	0.84
RM-60	Standard	60 m	400 W	40-50 KHz	0.84
RM-75	Standard	75 m	400 W	25-30 KHz	1.05
RM-80	Standard	80 m	400 W	25-30 KHz	1.05
RM-6S	Super	6 m	1 kW	250-400 KHz	1.00
RM-10S	Super	10 m	1 kW	250-400 KHz	1.00
RM-11S	Super	11 m	1 kW	250-400 KHz	1.00
RM-15S	Super	15 m	1 kW	150-200 KHz	1.20
RM-20S	Super	20 m	1 kW	100-150 KHz	1.25
RM-40S	Super	40 m	1 kW	50-80 KHz	1.80
RM-75S	Super	75 m	1 kW	50-60 KHz	2.10
RM-80S	Super	80 m	1 kW	50-60 KHz	2.10



Mobile HF Antennas Hustler Masts

MO-1

Mobile mast 54" length, for bumper, fender or hitch mounting. Folds over at 15" above base. Made of highest quality heat treated Stainless steel and aluminum parts. 3/8" x 24 threaded

MO-2

Mobile mast, 54" length, for bumper, fender or hitch mounting. Folds over at 27" above base. 3/8" X 24 threaded

MO-3

Mobile mast, 54" length, for bumper, fender or hitch mounting. solid aluminum with white vinyl coating. Does not fold over. 3/8" X 24 threaded

MO-4

Mobile mast 22" length, trunk or deck mounting. Three retuning tip rods included. 3/8" X 24 threaded

Professional Chrome Series

C-32

Chrome plated 1-1/2" ball mount. Furnished complete with rubber pad, steel backup plate, all mounting hardware and hex key.



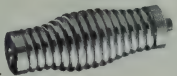
C-30

Chrome plated 4" spring. Copper braided center conductor to prevent detuning. Accepts 3/8" x 24 antennas



C-29

Stainless steel 4" spring. Copper braided center conductor to prevent detuning. Accepts 3/8" x 24 antennas



Resonator Spring

RSS-2

Finest quality stainless steel spring for use between resonator and Hustler antenna mast. This 3" spring absorbs shock when the antenna strikes overhanging obstructions. Supplied ready for easy installation with 3/8" x 24 threads, female on one end, and male on the other. Copper braided center conductor to prevent detuning.



Magnet Mount

MBM "Super" Magnet

- 95 lbs. Pull strength
- Powerful 5 inch diameter magnet
- 8 pole magnet
- 16 feet RG 58/U coax with PL-259 connector.
- 3/8" x 24 female threads
- Recommended for antennas up to 48".



Quick Disconnect

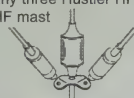
QD-2

100% Stainless Steel. Remove antenna from mount in seconds with push and twist release. Every part including the compression spring is manufactured from the best available 100% stainless steel. Special design of enclosed compression and lock assembly assures freedom against ice and dirt jam up. Accommodates small, medium and large mobile antennas. Equipped with 3/8" x 24 threads, female on one end and male on the other.



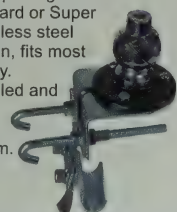
VP-1

Automatic bandswitching using any three Hustler HF resonators. Adapts any Hustler HF mast to tri-band operation. No additional tuning necessary.



Bumper Mount BM-1

Design is rugged for supporting Hustler antennas with the Standard or Super resonators. Heavy stainless steel strap, stronger than chain, fits most bumpers inconspicuously. Assembly is easily installed and held rigid by "J" bolts at the top and a bumper strap clamp at the bottom.



Professional Stainless Steel Series

SSM-1

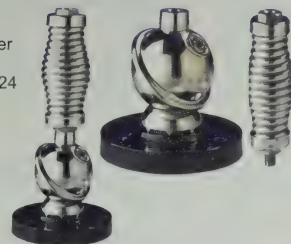
Heavy-duty mount with 4" stainless steel spring with copper braided center conductor to prevent detuning. 180 degree adjustable 2" diameter stainless steel ball. Accepts 3/8" x 24 antennas

SSM-2

Heavy-duty 2" diameter stainless steel ball mount. 180 degree adjustable. Accepts 3/8" x 24 antennas.

SSM-3

Heavy-duty stainless steel 4" spring with 3/8" x 24 coupling stud. Copper braided center conductor to prevent detuning.



HLM Trunk lip mount designed for hatch and slanted back vehicles. 180 degree 1" diameter ball, which accepts 3/8 x 24 antennas. RG58/U coax with PL-259 connector.



TLM Trunk lip mount, which accepts 3/8 x 24 antennas. RG58/U coax with PL-259 connector.



HOT Trunk lip mount with easy off/on by using thumb knob. 180 degree 1" diameter ball, which accepts 3/8 x 24 antennas. RG58/U coax with PL-259 connector.



RVM Recreational vehicle mount with heavy duty bracket. Easy antenna removal or lay down with thumb knob. 1" ball that accepts 3/8 x 24 antennas. RG58/U coax with PL-259 connector.



2M/70CM Dual Band Series Antennas

Radiall/Larsen dual band antennas provide excellent performance for simultaneous use of VHF and UHF amateur frequencies. Each Radiall/Larsen dual band antenna is factory preset to guarantee optimum performance with no tuning required.

NMO-2/70-SH \$40.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB w/spring
Height: 17"
Whip: WNMO2/70SH

Lower profile amateur 2m/70cm dual band antenna with spring for NMO mounts.

NMO-2/70B (black) \$65.99

Freq: 144-148/440-450 MHz
Gain: 2.4/4dB
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 33.5"
Whip: W2/70B

Amateur 2m/70cm dual band antenna for NMO mounts. Available in chrome (below).

NMO-2/70C (chrome) \$60.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: 5/8 Wave
UHF: Collinear
Base: NMO2/70BCO
Height: 36.75"
Whip: W2/70

Amateur 2m/70cm dual band antenna for NMO mounts. Available in black (above).

MM-2/70PL \$50.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: 3" Round Mag Mount
Height: 17"
Whip: WNMO2/70B

Complete 2m/70cm magnetic mounting antenna with 12' of RG58A/U coax.

NMOQ-2/70-B (black) \$36.99

Freq: 144-148/440-450 MHz
Gain: Unity
Power: 100 Watts
Type: VHF: Center Loaded 1/4
UHF: Center Loaded 3/4
Base: NMOUHFBASEB
Height: 18"
Whip: WNMOQ2/70B

Kulglass Series High Performance Glass Mount Antennas

Radiall/Larsen's Kulglass™ (KG) series uses a patented low impedance design and advanced materials to produce the world's best on-glass antenna. The KG uses advanced resin polymer plastic to completely enclose the circuit board or loading coil for mechanical durability and weather resistance. 3M's best adhesive tape, plus Radiall/Larsen's unique bonding enhancer ensure the best possible grip to the glass.

KG-2/70-CX-PL \$116.99

Freq: 144-148/442-448 MHz
Gain: 2.4/4.5dB*
Power: 50 Watts
Type: VHF: 1/2 Wave
UHF: Collinear
Base: KG2/700/S
Height: 32.5"

*Ground plane required for gain

Glass mount dual band antenna for 2m/70cm amateur radio frequencies.

KG-144-UD-PL \$83.99

Freq: 144-160 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG1440/S
Conn: PL-259
Height: 48"
Whip: WKG144

Complete KG glass mount antenna.

KG-220-UD-PL \$83.99

Freq: 220-225 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG2200/S
Conn: PL-259
Height: 26.5"
Whip: WKG220

Complete KG glass mount antenna.

KG-440-UD-PL \$71.99

Freq: 440-460 MHz
Gain: 2.4dB
Power: 100 Watts
Type: 1/2 Wave
Base: KG4400/S
Conn: PL-259
Height: 15"
Whip: WKG440

Complete KG UHF glass mount antenna with coax and connector.

Tri-Band Scanner Antenna

NMO-150450800 \$29.99

Freq: 150-165/450-470/806-940 MHz
Gain: 2.14 dBi
Type: Tri-Band Scanner Only
Mount: NMO
Height: 16.5"

Radiall/Larsen Exclusive Kulduckie Portable Series

Superior transmit range and tough mechanical durability are the hallmark of Radiall/Larsen portables. All center cores are made of brass or copper plated steel to maximize RF emission. Fully soldered connections and silver-plated components improve electrical efficiency. Double spring BNC's also reduce wear on the mount. Other styles available.

KD4-146-HQ (2m) \$25.99

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/4 Wave Helical
Conn: BNC
Height: 8"

KD-14-2M-HW \$38.99

Freq: 144-148 MHz
Gain: Unity
Power: 25 Watts
Type: 1/2 Wave Telescoping
Conn: BNC
Height: 8.5 to 42"
Whip: WKD142MHW

KD4-2/70 \$36.99

Freq: 144-148/442-448 MHz
Gain: Unity
Power: 25 Watts
Type: VHF: Loaded 1/4 Wave
UHF: 1/4 Wave
Conn: BNC
Height: 8"
Impedance matching transformer provides high Q and deeper resonance.

Hear The Difference

Industry's Best NMO Mobile Antennas

Radiall/Larsen's own version of the standard 3/4" Motorola TAD/TAE type mount uses advanced design, materials and construction to provide a premium mount. For demanding outdoor applications, the chemical resistant NMO series is housed in a resin polymer plastic shell which is completely molded around the nickel plated brass whip stud to eliminate moisture damage. Our superseal gasket also greatly reduces water intrusion under the base.

NMO-27C (chrome) \$32.99

Freq: 27-31 MHz
Gain: Unity
Power: 200 Watts
Type: Loaded 1/4 Wave
Base: NMO27BCO
Height: 53"
Whip: W490

NMOQ-SPEC \$13.99

Freq: 136-512 MHz
Gain: Unity
Power: 200 Watts
Type: 1/4 Wave
Height: 21"

NMO-150C (chrome) \$30.99

NMO-150B (black) \$33.99

Freq: 144-174 MHz
Gain: 3dBd
Power: 200 Watts
Type: 5/8 Wave
Base: NMO150BCO
Height: 51.75"
Whip: W490

NMO-220C (chrome) \$30.99

NMO-220B (black) \$36.99

Freq: 220-225 MHz
Gain: Unity
Power: 200 Watts
Type: 5/8 Wave
Base: NMO220BCO
Height: 34.5"
Whip: W400

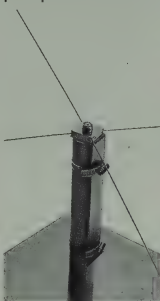
NMO-440C (chrome) \$29.99

NMO-440B (black) \$35.99

Freq: 440-460 MHz
Gain: 4.5dBd
Power: 200 Watts
Type: 5/8 over 1/2 Wave
Base: NMOUHFBASEB
Height: 33"
Whip: W154

Base Station Antennas

Radiall/Larsen manufactures a variety of small base station for directional and omni-directional applications. Each base station antenna is designed with premium materials to withstand the most demanding weather conditions. All base station antennas come with mounting hardware to attach to a pole up to 2" in diameter.



BSA-K \$53.99

Freq: 144-512 MHz
VSWR: 1.5:1 or less
Power: 200 Watts
Conn: UHF Female
Whip: 51-3/4"

Complete base station kit for designing a base station unit from 144-512 MHz. Comes with mounting hardware (antenna is extra). Works with NMO and UHF mount antennas.

Mobile GPS Antenna

GPS-NMO02 69.99

Freq: 1575.4 MHz
Gain: 5 dBic/28 ± 2 dB (LNA)
Voltage: 5 VDC
Type: GPS NMO mount
Height: 1.3" high x 2.9" diameter

Mounts

Larsen has a full line of permanent and temporary mounts to solve nearly every installation problem. Each mount is manufactured of the highest quality materials, including premium coax.

NMO-K \$15.99

Motorola style
roof mount
Size: 3/4"
Coax: 17' RG-58A/U
Conn: PL-259



NMO-MM \$32.99

Motorola style
magnetic mount
Size: 3-1/2" x 3"
Rectangle
Coax: 12' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



NMO-TLP \$29.99

Motorola style
trunk lip bracket,
black

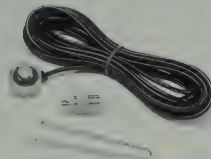
Size: 1-3/4" x
1-3/4"
Coax: 17' RG-
58A/U
Conn: PL-259



PO-K \$30.99

S0-239 female type
roof mount

Size: 3/4" hole
Coax: 17' RG-58A/U
Conn: PL-259



PO-MM \$36.99

S0-239 female type
magnetic mount

Size: 3-1/2" x 3"
Rectangle
Coax: 17' RG-58A/U
Conn: 58FCP
Pull Strength: 90 lbs.



TMB-34 (chrome) \$5.99

TMB-34B (black) \$7.99

Trunk mounting bracket
for NMO antenna.

Size: 1-5/8" x 1-5/8"
Mount: NMO



Parts and Accessories

W-490 \$8.99

Chrome .100 tapered replacement whip
for 144 MHz. (49")

W-490B \$12.99

Black .100 tapered replacement whip
for 144 MHz. (49")

W-2/70B \$27.99

Black .100 dia. replacement whip
for NMO 2/70B (approx. 31")

RADIAL/LARSEN

antenna technologies

Radiall/Larsen Antenna Technologies

3611 NE 112th Avenue

Vancouver, WA 98682

360 944-7551, Fax: 360 944-7556

Email: info@radialllarsen.com

Web: www.radialllarsen.com

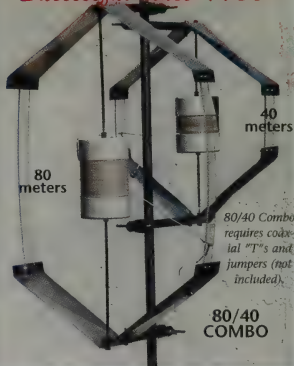
More RADIAL/LARSEN

See listing in Price Guide

ISOTRON BILAL COMPANY

Antennas for Very Limited Space
Simple & Effective...

*Tried, Proven and
Successful since 1980*



80/40 COMBO

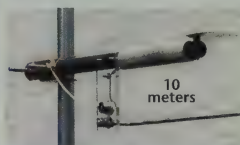
- Solve restricted space problems.
- Easy, quick, and simple installation.
- Handles up to 1,000 watts PEP.
- Excellent portable operation - emergencies, RV's, field day, motels, Maritime operation.
- Not dependent on a grounding system for performance.
- Unobtrusive appearance, making a very discreet looking installation.
- Very Stealth.
- Excellent Low Noise reception and transmitting quality performance is not compromised by its compact design.
- Tunes and performs without radials.
- Multi-band operation on one feedline with back to back mounting. Any other combination of three bands may be substituted on special order.
- Durable construction, can be used in extreme weather conditions, will not bend in high winds. No motors or mechanical tuning devices to fail.



Common Specifications: 1000W PEP power rating (300W, CW, AM, FM, RTTY) • 50-75Ω coax feed • Omni-directional radiation pattern • Bandwidth shown is within 2:1 SWR but may vary with environment • Stainless steel fasteners • Zinc plated u-bolts • Tempered aluminum components • Cast acrylic and PVC insulators • THHN #14 solid copper coils • 85 mph wind rating

Individual Specifications:

Model	160C	80	40	20	15	10	6
Band	160 meters	80 meters	40 meters	20 meters	15 meters	10 meters	6 meters
Freq. (MHz)	1.8-2.0	3.5-4.0	7.0-7.3	14-14.35	21-21.450	28-30	50-54
hwxwd (in.)	114 x16x15	32x16x15	22x16x15	21x8x4	21x1½x4	16x1½x4	16½x2x4
BW	100kHz	110kHz	250kHz	310kHz	450kHz	1MHz	1.25MHz
Windload (sq. ft.)	1.697	1.37	1.0	0.23	0.23	0.16	0.13
Weight	7 lbs.	6 lbs.	4 lbs	2 lbs	2.0 lbs	1.5 lbs	1.5 lbs.
PRICE	\$173.99	\$98.99	\$88.99	\$78.99	\$78.99	\$78.99	\$78.99



Multiband Models (top & right)

80/40 COMBO Same as individual model specifications above. Operate 80/40 meters with one feed line 32"x16"x30", 2.37 sq. ft. 10 lbs. **\$177.99**

20/15/10 COMB Covers same as individual model specifications above. Operates 20/15/10 meters with just one feed line **\$198.99**

SPECIAL ORDER! - You can make up your own combination. Substitute 30m for 40m in the 80/40 Combo or 17m for 15m in the 20/15/10 Combo. MARS, CAP and Commercial models available.

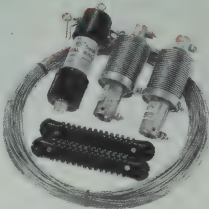
DIAMOND ANTENNA

D-130J Super Discone Copied by many, equaled by none. Professional quality. Ultra-wide-band omnidirectional - receives amateur, air traffic control, police, fire and other utilities from 25-1300MHz. Can transmit 80-1300MHz (50MHz with adjustment). Rust-free stainless steel employed in major component parts. Ideal antenna for scanners and receivers. Use standard RG213 or RG8X coax. Mast mounting U-bolts included. 67" h, 2.2 lbs. **\$99.99**



UNADILLA

W2AU/W2VS 5 Band Antenna Kit Resonant on 40 and 80M. SWR on 10, 15 and 20M will be higher (2:1 to 4:1) and a transmatch may be necessary to operate these bands. Includes 40M traps, W2AU balun, end insulators and 120 feet of #14 stranded antenna wire. Rated 2KW PEP, 110 feet long. **\$85.99**



Van Gorden Engineering



DIPOLE ANTENNAS

Complete with Hi-Q 1:1 balun, #14 stranded copper antenna wire, plastic insulators, and 100 ft. of nylon rope. Rated for full legal power. May be used in an inverted-V configuration.

D-80 80m, 130'	\$32.99
D-40 40m, 66'	\$29.99
D-20 20m, 33'	\$28.99
D-15 15m, 22'	\$27.99
D-10 10m, 16'	\$26.99

Shortened Dipoles Construction is the same, and includes traps as shown above.

SD-80 80m, 90'	\$36.99
SD-40 40m, 45'	\$34.99

ALL BANDER All Bander Dipole Covers 160 to 10M using an antenna tuner with balanced output. Full 135 ft. long (or less, as an inverted V or sloper). Trim to fit small lots. Assembled, with #14 gauge copper wire, center and end insulators and 100 ft. of 450Ω balanced line. 2KW PEP. **\$29.99**

SHORTY All Bander As above, but with loading coils to shorten the length to 70' overall... **\$44.99**



MULTIBAND ANTENNAS

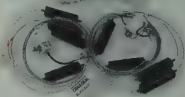
G5RV Covers 3.5-30MHz, plus 1.8MHz as a Marconi-type antenna with a tuner. Consists of a 102 ft. flat top with a 31' long section of 300Ω (450Ω for models below) KW twinlead, a transformer/coupler and 70 ft. of RG-8X coax and connector. 2KW PEP, assembled **\$50.99**

G5RV JR 7-30MHz, 52', 17' twinlead **\$24.99**

G5RV-E 3.5-30MHz, 102', 31' twinlead **\$28.99**

G5RV-M 1.8-30MHz, 204', 65' twinlead **\$50.99**

ANTENNA SUPERMARKET



EAVES TWIN The Eavesdropper Shortwave Broadcast Receiving Antenna A 42 ft. long center-fed dipole with 8 automatic bandswitching trap circuits which electrically separate the antenna segments - just tune your receiver to the desired band. The Eavesdropper covers the 11, 13, 16, 19, 21, 25, 31, 41, 49, 60, 75 and 90 meter bands. Includes The Zap-Trapper® gas-tube lightning arrester for receiver protection and 50 ft. of 450-pound test support rope. Completely assembled, ready to use. With 100' of 72Ω twin lead **\$89.99**

EAVES S0239 With weather-proofed SO-239 coaxial center connector, coax not included. **\$89.99**

ICOM

AH-703 HF/50MHz Five-Band Antenna
Designed for portable operation with Icom IC-703 and IC-703PLUS. It covers the 7, 14, 21, 28 and 50MHz bands with a 1/4-wave design and 20W power capacity. The bands are covered by changing the supplied coils. Requires a PO-type base (the AH-703 terminates to a PL259). Base and coax are not supplied. • 4.6'h, 12 oz **\$199.99**

YAESU

Choice of the World's top DX'ers®

ATAS-25 HF/VHF/UHF QRP Field Antenna (right) Perfect for portable use with the Yaesu FT-100D, FT-817, FT-857 or FT-897. 7, 14, 21, 28, 50, 144 and 430MHz coverage. Band switching accomplished by changing supplied elements and adjusting coils. Matched SWR is less than 2.0:1.

- HF/6M – 100W SSB/CW @ 50% duty cycle (50W AM/FM) • 144/430 MHz – 50W all modes • Requires camera-type tripod (not supplied) • SO-239 base accepts PL-259 • 7.2'h maximum • 2.05 lbs..... **\$229.99**

ATAS-120 HF/6/2/430 Motorized Tuning Antenna (left) Resonates the radiating element for lowest SWR using control voltages sent via the coaxial cable to Yaesu transceivers equipped for the ATAS system. Without duplexer, coaxial cable must be moved manually to correct jack when switching (VHF/UHF). Solid, sliding sections tune 20% faster than ATAS-100. Mounts directly onto a standard Diamond or Comet mobile mount. • 120W maximum input • Less than 2:1 matched VSWR • 4.5' to 5.25', 1.98 lbs..... **\$299.99**

ATBK-100 VHF/UHF Antenna Base Kit Not required, generally, unless operating VHF/UHF with the ATAS-120 off-vehicle (balcony railing, etc.), when it restores low-angle response for enhanced performance. Use with base mount **\$89.99**

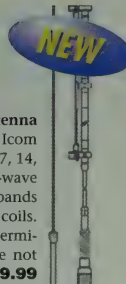
hy-gain

HF Vertical Antenna Effective counterpoise replaces radials and ground system

- Automatic bandswitching with a single coax cable feed. Each band is individually tunable. Extra wide VSWR bandwidth. End fed with broadband matching unit. DC grounded. • Low angle of radiation - 17° for exciting DX. • 2.5 sq. ft. wind surface area • Small area required for mounting easily on roofs, decks and patios. • Handles full legal limit 1500W key down for two minutes • Aircraft quality aluminum tubing, stainless steel hardware; 80 mph wind survival.

AV-620 20-6M 6-Band No traps, coils or radials. 22.5' tall, 10.5 lbs..... **\$269.99**

AV-640 40-6M 8-Band Uses 1/4-wave stubs on 6 thru 17M and end loading and capacity hats on 15 thru 40M. 25.5' tall, 17.5 lbs **\$359.99**

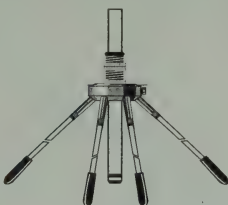


A-99

A-99 10M Base Antenna with Twin Ring Adjust-A-Match Tuning Voltage-fed, half wave variable, mutual transfer inductance tuned antenna. It's economical and easy to use! The SOLARCON sealed base unit is tuned with external inductance rings. Impedance remains constant over the tuning range. Simple Tuning! Raising the tuning rings raises the frequency and lowering the rings lowers the resonant frequency.

Rugged, three-piece, white fiberglass construction with triple-plated brass fittings. It's easy to assemble and install. The optional GPK-1 ground plane radial kit makes it perform even better!

- Full 10 meter band coverage • 3 dBi gain
- 2kW power limit • Low angle of radiation for DX • DC grounded • Mounts on 1.5 in. mast • Uses 52Ω coaxial cable with SO-239 connector • 17 ft. 8 in. length..... **\$64.99**



GPK-1 Groundplane Kit Use with the A-99 for 30% more power gain and lower angle of radiation. Collar and 4 fiberglass radials **\$39.99**

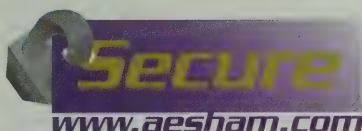


SKYHAWK 3X10 Triband Yagi A design breakthrough. 3-band, 10-element, 20/15/10M, rust free **Drop Ship \$999.99**

HF-2V 80/40 Vertical 32' **\$269.99**

HF-6VX 6-Band Vertical 26' **\$349.99**

HF-9VX 9-Band Vertical 26' **\$399.99**



COMET™

HF/VHF/UHF MOBILE ANTENNA

For radios that operate HF/6M/2M/70cm

UHV-6 Designed for 6 and 2M and 70cm basic operation without tuning. Additional coverage for 40, 15 and 10 meters may be added by installing the supplied coils for those bands. Coils for 20, 17, and 80M are optional. Choose either one, two, or three coils and add one to the top, and one or two to the side, in any combination. Automatic bandswitching. Each HF element tunes independently without affecting VHF/UHF.

Only 7 ft. 2 in. tall with the 40M coil attached to the top. A unique fold-over hinge pivots approximately 5 inches from the bottom for garaging, entering parking structures, etc.

Installs on any standard SO-239 (PO) type mount; no special brackets are needed. Several duplexers/ triplexers are available for all multiband radios. - see the index under duplexers for selection..... **\$159.99**

L-3.5 80M coil **\$4.99**

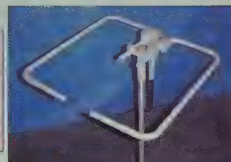
L-14 20M coil **\$9.99**

L-18 17M coil **\$9.99**

CF-530 1.3-90/125-470MHz dplx'r. **\$4.99**

CF-706A 1.3-56/75-470MHz dplx'r **\$4.99**

CA-52HBA Wide Band 6M Beam HB9CV, 4-element • 50MHz band frequency • 50Ω impedance • <1.5:1 (50-54 MHz) VSWR • 10.4dBi • Half power angle <54° • Over 19dB F/B ratio • 400W maximum power, SSB • Boom length, 10.5 ft. • 7.3 ft. turning radius • SO-239 connector • 1.0 to 2.5 in. mast diameter • 4 lbs, 14 oz..... **\$129.99**



HO Loops At times, when using highly directional VHF or UHF antennas, there are signals you cannot hear off the sides and back. The addition of an HO-Loop to your set-up will enable you to be aware of those stations you may be missing. Great for round tables, nets and monitoring for band openings.

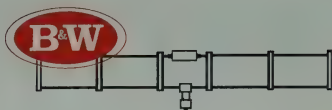
HO-Loops are horizontally polarized and omnidirectional, ideal for mobile or base operation with contacts up to 200 miles not uncommon. Typical gain is 4.0+ dBd, and power rated at 800W or 1.5kW stacked. They're easily adjustable and have a wide bandwidth that ensures high performance regardless of the weather.

6M-HO-LOOP 50-50.3MHz, 29.5' sq.... **\$113.99**

2M-HO-LOOP 144-144.5MHz 11.25' sq.... **\$49.99**

222-HO-LOOP 220-224MHz, 7.75' sq **\$49.99**

432-HO-LOOP 430-436MHz, 4.4' sq **\$49.99**



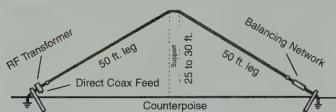
BROADBAND ANTENNAS

• MARS, ARES, RACES, CAP, Amateur – One antenna does all "out of band" frequencies! Single antenna solution for regular amateurs • Low cost – Compared to multiband antennas. Utilize one antenna instead of several. No need for an antenna tuner or antenna switches. • Performance – Not limited to conventional ham bands. Operate on any frequency in the antenna's bandwidth, and have VSWR of 2:1 or better. • Low Noise – Capture weak signals in receive mode. Better performance than any vertical and very reliable. • Simple to Use – Work any frequency you want with low SWR without measurements and tuning.

BROADBAND FOLDED DIPOLES

These antennas operate all HF frequencies continuously within their design range without an antenna tuner, plus 6M with a tuner. Install as flat top, inverted vee, or sloper. Constructed of #14 stranded copperweld or stainless steel wire. Unbalanced 50Ω input with SO-239 connector. Shipped completely assembled. Handles 2 KW PEP.

- BWD-20** 14-30, 20 ft., copperweld **\$179.99**
BWD-45 7-30, 45 ft., copperweld **\$189.99**
BWD-65 4-30, 65 ft., copperweld **\$199.99**
BWD-90 1.8-30, 90 ft., copperweld **\$209.99**
BWDS-65 4-30, 65 ft., stainless **C/O \$319.99**
BWDS-90 1.8-30, 90 ft., stainless **C/O \$339.99**
FDMK Folded Dipole 3-pole mtg. kit..... **\$39.99**



BROADBAND END-FED VEE ANTENNA

Unique design, covers 1.8-30MHz continuous, with a VSWR of <2:1 without an antenna tuner, 6M with a tuner. Installs with termination at both ends by ground stakes (not included), and the center about 25' above the ground. Omnidirectional, high angle radiation at lower frequencies. Increased angle from 5-15MHz, above 15MHz more directional in the line of the antenna wire. In limited space, wire may be shortened without greatly affecting the VSWR, but lowering radiation efficiency. Excellent EMI rejection and is extra quiet to capture weak signals. Handles 2kW PEP. Fully assembled, uses #14 stranded copperweld or stainless steel. 110' long, 7 lbs.

- AC-1.8-30** Copperweld wire **\$209.99**
ACS-1.8-30 Stainless steel wire **C/O \$339.99**

AP-10A Window/Portable 300W PEP Antenna A 10-40M base loaded antenna with 7-30 MHz continuous coverage, plus 2 and 6M. Tunes a low VSWR by tapping a fly lead up or down the coil and adjusting the supplied counterpoise wire. A quick and dependable antenna system when larger antennas cannot be used. Supplied with mounting bracket/clamp, counterpoise wire and 10 feet of coax **\$89.99**

High Sierra Antennas

MOTORIZED ANTENNA

PLATINUM PACK Continuous coverage, Motor Driven HF Antenna Package The HS-1800/PRO antenna provides continuous tuning from 3.5 to 30MHz with a typical VSWR of less than 1.5:1 across the entire tuning range. Removing the supplied 6-foot whip provides a tuning range from 6.9 to 60MHz. The "best antenna" for general mobile use because of its light weight, high performance and ability to cover the entire HF spectrum. Also a great idea for antenna-restricted QTHs, ARES/RACES and more!

Complete package, ready to install, includes the HS-1800/PRO (right) – black powder coat finish with black stainless-steel whip, black universal mounting bracket, quick-disconnect manual control box, RF filter assembly and installation kit (20 feet of control cable, wire ties, (2) PL-259's, 3 feet of ground strap and connector sealing material)..... **\$495**



HS-120 Capacity Hat (left) Six stainless steel rods with aluminum tips inserted into a brass hub. Hat diameter is 1.5 feet. Installed on the HS-1800 it's roughly equal to adding 6 more feet of whip.. **\$50**

HS-202CL (right) 2" x 2" receiver "lay back" adapter for the universal mounting bracket.. **\$100**

HS-214CL (right) 1.25" x 1.25" receiver "lay back" adapter for the universal mounting bracket.. **\$100**



PROSTAR® 1000 VHF/UHF/EM Antennas Features die-cut impedance correlator that allows close spacing of antenna elements. Manufactured from high tensile aluminum for a strong, compact antenna that will better withstand strong winds and ice loading. Protected with polymer finish.

- PR-7010** Metropolitan 22 active elements (9 VHF, 13 UHF) • 66.5" boom..... **\$39.99**
PR-7032 Far Suburban 33 active elements (13 VHF, 20 UHF) • 103.25" boom..... **\$64.99**
PR-7042 Fringe (top) 43 active elements (17 VHF, 26 UHF) • 149.75" boom..... **\$99.99**



Shakespeare®



VHF MARINE ANTENNAS

4187 Ratchet Mount (above) Stainless steel, 4-way ratchet design with handle for deck or bulkhead mounting. Standard 1"–14 male threads..... **\$36.99**

396-1 Center-fed 1/2 Wave Coaxial Sleeve Antenna Basic 3dB antenna designed to reduce signal fading when working in rough seas. Widely used by the Coast Guard. 5MHz bandwidth, 3dB gain, 50W • Shakespeare, white fiberglass • Brass and copper elements • Deluxe chrome-plated brass ferrule • One section • 5 ft. length, 15' RG-58 cable with PL-259. Use 4187 ratchet mount..... **\$69.99**

420 Skipper™ Center-fed 1/2 Wave Coaxial Sleeve Antenna Economical, and a good basic 3dB antenna for steady, day-to-day cruising in calm to moderate seas. Includes a polycarbonate lift/lay deck mount, leveling plate and hardware. 5MHz bandwidth, 3dB gain, 50W • White Shakespeare fiberglass • Brass and copper elements • Polycarbonate ferrule • One section • 5 ft. length, 15' RG-58 cable with PL-259..... **\$69.99**

5101 Centennial™ End-fed Antenna with Matching Stub High-end features in an 8' antenna with a brass element and a smooth, high gloss, polyurethane finish that won't turn yellow in the sun. 5MHz bandwidth, 6dB gain, 50W • One section • Brass and copper elements • Chrome-plated brass ferrule with standard 1" x 14 thread • 8 ft. length • Includes 15 ft. RG-58 cable and a PL-259 coaxial connector. Use with 4187 ratchet mount..... **\$59.99**

5206-C End-fed Antenna with Matching Stub Economical, lightweight and self-supporting antenna for good communications where range is not the predominant factor. 3MHz bandwidth, 6dB gain, 50W • White Shakespeare fiberglass • Chrome-plated brass ferrule • One section • DC grounded • 8' length, 15' RG-58 cable with PL-259. Use with 4187 ratchet mount..... **\$49.99**

5202 Collinear-phased 5/8 Wave Elements A rugged, professional quality antenna featuring a heavier duty radome and tough brass and copper construction for maximum efficiency and extra range. 3MHz bandwidth, 6dB gain, 50W • White Shakespeare fiberglass • Chrome-plated brass ferrule • One section • DC grounded • 8' length, 20' RG-58 cable with PL-259. Use with 4187 ratchet mount..... **\$89.99**

Used & Demo

Equipment lists

Updated regularly on the web.
Check them out and order **On-line**

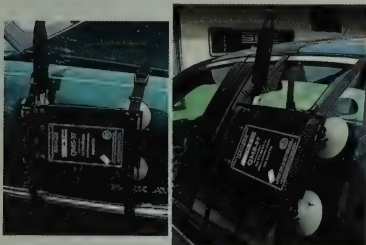


ANTENNAS

54-23 Stealth Kit SGC's Stealth Kit is the ALL-IN-ONE convenient antenna solution:

- Erect an emergency field operation in minutes.
- The perfect GRAB-AND-GO antenna system for overnight or overseas.
- Configure an undetectable loop antenna for installation in restricted areas.

Everything you need to get on the air FAST! Kit includes the SG-237 Smarttuner, 80 feet of quality 18 gauge flexible wire, 30 feet nylon rope, 6 mounting clips, 12 reusable tie wraps, SG-237 and STEALTH Kit manuals **\$399.99**



QMS Quick Mount System The QMS is a low profile mobile system. Achieve increased radiation and efficient tuning with its built-in Smarttuner™ system. The QMS mounts on any vehicle, with a patented strap and buckle system, and with no holes or damage to the vehicle. Installation can be permanent or temporary and takes just 15 minutes. A lightweight mobile antenna such as the SG-303 or SG-307 provides a wide frequency range and easy tuning. Visit the SGC website for more information on their full line of antenna solutions and HF accessories.

55-47 QMS 2 QMS including SG-230 antenna coupler and SG-303 whip antenna **\$894.99**

55-48 QMS 3 QMS including SG-235 antenna coupler and SG-303 whip **Closeout \$1899.99**

55-50 QMS 37 QMS including SG-237 antenna coupler **\$549.99**



SG-303 Whip Antenna Lightweight, helically wound, low cost mobile antenna system for operation between 2-30MHz. 9 feet overall length in two sections of 50 inches each. For use on vehicle or boat up to 60mph. 1.8-30MHz, 50 Watts PEP voice or CW. Loaded at 13.2 and 22MHz. High voltage insulated 4-way stainless steel ratchet mount. Heavy duty reinforced base spring. 3 foot high voltage wire, one end terminated by a round lug. High voltage wall feed-thru bushing (hole 0 = 0.890 inch). 3 ft. 3/4 inch wide ground strap for coupler grounding.

Antenna must be used with an antenna coupler such as the SG-230.

55-27 SG-303 w/mount. C/O **\$399.99**

55-67 SG-303 whip only C/O **\$249.99**

55-28 SG-307 Whip With Mount Lightweight, helically wound, low cost mobile antenna system for operation between 1-60MHz. 7 feet overall length. For use on vehicle or boat up to 75mph. 150 Watts PEP voice or CW. Loaded at 8 and 25MHz. High voltage insulated 4-way stainless steel ratchet mount. Heavy duty reinforced base spring and threaded male stud 3/8-24. 3 foot high voltage wire, one end terminated by a round lug. High voltage wall feed-thru bushing (hole 0 = 0.890 inch). 3 ft. 3/4 inch wide ground strap for coupler grounding **\$449.99**

Antenna must be used with an antenna coupler such as the SG-231.

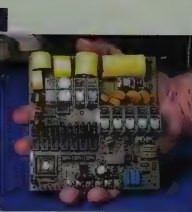
SPEAKER

70-14 ADSP: Noise Reduction Speaker Noise reduction and tone interference rejection in AM, SSB, FM and CW operation has never been easier. Incorporates SGC's proprietary noise reduction technology in a small package. "One-Touch" control selects 13dB or 26dB of noise reduction. Requires 12VDC @ 500mA and speaker output or headphone jack. 3" h x 5" w x 2.5" d, 11 oz **\$129.99**



ANTENNA CONTROLLER

54-25 MAC-200 Master Antenna Controller Select the right antenna, for the right band, at the right time with the MAC-200. The Master Antenna Controller operates as your base station control center, eliminating complicated switching and tuning. With two built-in computers, the MAC-200 can select and tune up to 5 antennas automatically, quickly and accurately. Built-in memories fine tune to minimum SWR with any balanced or unbalanced antenna. It instantly recalls settings from memory, allowing retuning in less than 10 minutes. Monitor your power and SWR with convenient meters on the front panel. Using SGC's well-known Smarttuner™ technology, the MAC-200 is the perfect choice for anyone using multiple antennas in a base station system. • 1.8-60MHz • 1.5-200W • 168 memories • Pi configuration • 230mA average current • < 2 second random set time • 8.5" l x 6.5" w x 3" h, 5 lbs **\$359.99**



SG-237/SG-237 PCB



ANTENNA TUNERS

SGC Smarttuners™ deliver greater impedance matching, more tuning steps and more antenna choices than any other antenna coupler on the market. Get frequency agility and precision tuning. They are independently intelligent, matching ANY HF transceiver and ANY antenna. Smarttuners are microprocessor controlled; analyzing the conditions of your antenna and automatically adjusting for the best match. They also remember each match, cutting retuning time to under 10 minutes when changing frequencies. Smarttuners are available for power levels from 1.5 to 500 Watts and frequency ranges from 1.0 to 60MHz. They provide all purpose tuning ideal for base, mobile, portable, marine or aviation. Any budget, any installation... Your choice for antenna tuning should be an SGC Smarttuner.

54-14 SG-230 Original Smarttuner™ 1.8 to 30MHz • 200W • 16.2" l x 12.2" w x 3.2" h, 8 lbs .. **\$489.99**

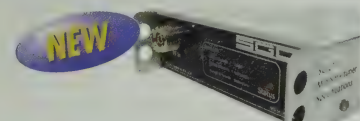
54-15 SG-235 High Power 1.8 to 30MHz • 500W • 16.2" l x 12.2" w x 3.2" h, 8 lbs **\$1169.99**

54-17 SG-231 Precision Smarttuner™ 1 to 60MHz • 100W • 11.5" l x 10.2" w x 3.2" h, 3.8 lbs. **\$529.99**

54-18 SG-237 General Purpose Smarttuner™ 1.8 to 60MHz • 100W • 9" l x 7" w x 1.5" h, 2 lbs **\$359.99**

54-19 SG-237 General Purpose Smarttuner™ PCB only • 1.8 to 60MHz • 100W **\$249.99**

54-22 SG-239 Budget Smarttuner™ 1.8 to 30MHz • 200W • 7.5" l x 6" w x 1.9" h, 2 lbs **\$179.99**



54-26 SG-211 Zero Power Consumption Smarttuner™ The SG-211, SGC's newest Smarttuner, provides the ZERO power consumption features you've wanted. This compact unit runs on 4 AA cells for 5 years. Lightweight, with no external power required, yet able to tune a 10:1 mismatch or worse. The unit features a naturally balanced output, capable of tuning most antennas. One external LED indicates tune, no tune and low battery. The SG-211 is the perfect companion for traveling or backpacking. • 1.8 to 60MHz • 60 Watts • 8.66" l x 4.69" w x 1.55" h, 1 lb **\$179.99**



ATOC Technologies

ANTENNAS & MOUNTS



VHF / UHF Antennas

Glass Mounted Antennas Dual Band and VHF

Each glass mount antenna includes instructions and mounting package. Replacement whips, base and remount kits are available. (NOTES: Some newer automobiles are equipped with "passivated glass" which does not permit on-glass antennas to work properly). Please check your owner's manual or your automobile dealer.

ATA270 2m / 440 MHz Antenna

Gain 2.6 dB at 2m and 4.0 dB at 440 MHz over 1/4 wave. Max power 50 Watts. 14' RG-58 cable with PL-259.

ATA144 2m Antenna

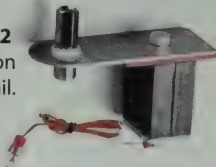
Gain 2.5 dB at 2m over 1/4 wave. Max power 50 Watts. 14' RG-58 cable with PL-259.

Stake Truck Bed & Magnetic Mounts from Iron Horse

Designed for the serious amateur on-the-go, these heavy-duty stainless steel mounts feature an expandable rubber base that locks mount when tightened for secure fit. Great for HF sticks and 102" stainless steel whip antennas. Both fit most pickup truck brands and models

IHSB-2

locates the antenna on either side of the bed rail.



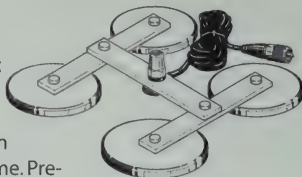
IHSB-4

locates the antenna directly over the truck bed rail.



IH4501 & IH4501-SO Quadruple Magnet Mount

4 x 5" MuleHorse Magnetic Mount Kit features four 5" magnets properly spaced on a heavy duty aluminum frame. Pre-wired with 17' RG-58 and PL-259. Triple chrome plated. IH4501 accepts 3/8" x 24 thread antennas. IH4501-SO accepts SO - 239 antennas.



HF Antennas

Iron Horse Series

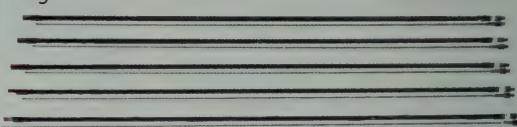


IronHorse

Enjoy great HF mobile performance with these rugged, easily tuned mono-band antennas. Made in the USA, Iron horse antennas are designed for maximum efficiency, low SWR and broad bandwidth. Each has 3/8 x 24 threads and is rated for 500 watts. Order the IHKD3S five antenna quick disconnect mounting kit to make changing bands a quick and easy operation. Just push, turn, and go!

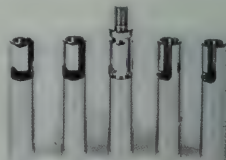
MODEL	DESCRIPTION	BANDWIDTH (KHz)
IHF75	75 m HF Stick	36
IHF40	40 m HF Stick	60
IHF30	30 m HF Stick	50
IHF20	20 m HF Stick	150
IHF17	17 m HF Stick	175
IHF15	15 m HF Stick	200
IHF12	12 m HF Stick	300
IHF10	10 m HF Stick	500
IHF6	6 m HF Stick	1000

Model IHF5S is a set of five HF antennas all in one vinyl bag. The set includes 10 - 15 - 20 - 40 - 75 m antennas.



Model IHKD3S

is a five pack quick disconnect mount kit.

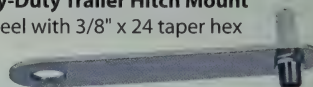


Model AN38

is an adaptor for NMO to a 3/8" x 24 thread antenna.

IHTH-1 Heavy-Duty Trailer Hitch Mount

All stainless steel with 3/8" x 24 taper hex w/ chrome-plated brass SO239 connector.



pro·am® ANTENNAS & ACCESSORIES

160-6 Meters Mobile

PHF Series Antennas

Single band whips consisting of a black fiberglass lower section with integrated coil and an adjustable and removable stainless steel whip, except for the PHF-160. These time-proven HF antennas are especially designed for maximum efficiency, low VSWR and broad bandwidth. They are power rated for 250 Watts P.E.P. and built to withstand considerable use. Standard 3/8" x 24 thread base. Assembled length on all models is 96 in. (the PHF-6 is 58 in.). The model **DAK** Dual Adapter Mount (\$13.99) accepts two antennas to make up a single band vertical or horizontal dipole which is perfect for limited space or portable operation.

Model	Band	Bandwidth	Price
PHF-160	160M	12 kHz	\$89.99
PHF-75	75M	36 kHz	\$29.99
PHF-40	40M	60 kHz	\$23.99
PHF-30	30M	100 kHz	\$23.99
PHF-20	20M	150 kHz	\$23.99
PHF-17	17M	175 kHz	\$23.99
PHF-15	15M	200 kHz	\$23.99
PHF-12	12M	300 kHz	\$23.99
PHF-10	10M	500 kHz	\$23.99
PHF-6	6M	1000 kHz	\$23.99

2 Meters

PHB-144 \$29.99

5/8 wave, 3dB gain over 1/4 wave, covers 144-174 MHz. Tuned, low loss coil with 1-1/8" threads to match Pro·am and 3/4 in. hole Motorola TAD/TAE mounts. Rated 100W, whip length 49 in.

CX-144 \$17.99

5/8 wave, 3 dB gain over 1/4 wave. Heavy duty matching coil with standard 3/8" x 24 chrome-plated base. Rated at 100W, length 49 in.

Dual Band 2M & 70CM +

MO144-440 \$21.99

A dual band antenna to over it all! 19" Covers 2M/70cm plus works great for all band scanners 25 MHz-1.3 GHz. Stainless steel whip. Mount with 1-1/8" threads match 3/4" hole Pro·am and Motorola TAD/TAE mounts. SWR less than 2:1. Gain: unity on 2m and 2.1dB over a 1/4 wave on 70 cm.

Thru Glass 2 Meter

GM-144 \$29.99

Mounts on windshield and operates thru-the-glass to a tuning unit mounted on the inside. Features a 27-1/2 in. copper plated whip with black finish, 14 ft. of RG-58 coax and PL-259 connector. Gain is 2.5 dB over a 1/4 wave. VSWR is 1.5:1 through the band. Rated for 50W. Tunable.

Some autos have "passivated glass" which does not permit antennas to work properly. Check your manual or dealer.

GM-144

TGS \$34.99

On-glass 30-1200 MHz receive antenna

Thru Glass 2M/70CM

GM-270 \$59.99

Dual Band 2M/70cm thru-the glass antenna featuring a 26-1/2 in. copper plated whip with black finish, 14 ft. of RG-58 coax and PL-259 connector. Gain is 2.6 dB over a 1/4 wave at 2m and 4.0 dB over 1/4 wave at 70 cm. VSWR is <2:1 through the bands. Rated for 50W. Tunable.

GM-270

MM-270B \$19.99

Dual Band 2M/70cm MICRO-MAG™ with a 1-1/8 in. black ABS rare earth magnetic base and stainless steel 20 in. whip. A 2M 1/4-wave and 70 cm 5/8-wave with unity gain and 1.5:1 VSWR throughout the bands. Rated for 50W on 2m and 25W on 70 cm. Has 9 ft. of RG-174 cable to a BNC connector.

MM-270B

Magnet Mount Antennas

VAA-002B \$23.99

2 meter 1/4 wave antenna with a 3-1/4 in. magnetic base. 19 in. 17-7ph stainless steel whip and 12 ft. of cable with PL-259 connector. Can also be trimmed for 220 or 450 MHz operation. Black finish.

VAA-002BBN \$27.99

Same, but with BNC antenna connector.

VAA-002B / VAA-002BBN

PAS

PAS \$19.99

Surface Motorola mount with 17 ft. of RG58 cable with PL-259 connector. Installs in 3/4" hole in roof, fender or cowl mount.

PASMO

PASMO \$7.99

PASMO Mount only, less cable and connector

Mounts

105AD \$6.99

Mount Assembly with chrome-plated brass hex and nickel-plated SO-239. For Plug to plug connections.

105HD \$3.99

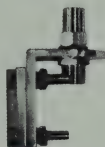
Chrome Mount Assembly that mounts by bolting through a 1/2 in. hole. Chrome-plated brass

103S \$24.99

Quick Disconnect mounting kit. One 3/8" x 24 base and five twist-lock connectors

120 \$7.99

Radio Hump Mount. Saw-tooth design grips without damage to carpet. Adjustable. Steel, baked black.



100ADT \$9.99

Extra heavy duty aluminum 3-way mirror mount. 3/8" x 24 mount and SO-239 connection.

100ADN \$10.99

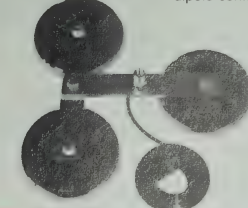
Extra heavy-duty aluminum double groove mirror mount with 3/8" x 24 mount and SO-239 connection.

SS-100MOT \$23.99

Stainless steel 3-way mirror mount with Motorola-style mount. Includes 10 ft. of cable to a PL-259

DAK \$13.99

Dual adapter mount with one lug and one SO-239. Accepts two PHF or other 3/8" x 24 mount antennas for vertical and horizontal dipole configuration.



PAM \$24.99

A 3-3/4 in. diameter low profile magnet Motorola mount pre-wired with 12 ft. of RG-58 cable to a PL-259 connector. Model PAMB is BLACK.

301 \$16.99

4 in. dia. with 3/8" x 24 mount.

401 \$19.99

5 in. dia. with 3/8" x 24 mount.

MM-3401 \$59.99

Maxi-Magnet mount kit features three 5 in. magnets in chrome cups spaced on a heavy duty aluminum frame. Prewired to a 17 ft. of RG-58 cable to a PL-259. Accepts standard 3/8" x 24 mount antennas. Model MM-3401B has BLACK magnet cups.

PHB-144

CX-144

AB5

PAQA

MO144-440

Multi-Band Mobile

AB-5 \$119.99

Consists of a 4 ft. aluminum mast and tri-top adapter with resonators included for 10, 15, 20, 40 and 75 meters. Also operates on 6 meters. Mast fits any standard 3/8 x 24 thread mobile mount. The 10, 15, and 20 meter resonators work without extra tuning. The interchangeable 40 and 75 meter resonators are easily tuned with their tunable tips.

Utility

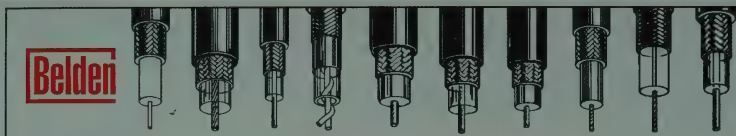
PAQA \$8.99

A unity gain stainless steel UHF/VHF whip that covers 136 to 866 MHz with cutting required. Nickel/chrome plated brass base with 1-1/8" threads to match Pro·am and 3/4" hole Motorola TAD/TAE mounts. Includes cutting chart.

PAT-2 \$19.99

A chrome low profile trunk-lip mount including 17 ft. of RG-58 cable with PL-250 connector. Model PAT-2B is BLACK.





Belden

COAXIAL CABLE

See Belden in the Price Guide

Model	Type	Dia. (in.)	Center conductor	Insulation type	Shield coverage	Jacket type	Imp. (Ω)	Vel. factor	Loss/100' 100 MHz
8216	RG-174 Sub-miniature	.11	26 AWG bare copper coat steel	Solid polyethylene	90% tinned copper braid	Black PVC	50Ω	66%	8.4 dB
8219	RG-58A/U	.195	20 AWG stranded bare copper	Foam polyethylene	96% tinned copper braid	Black PVC	53.5Ω	73%	4.5 dB
8240	RG-58/U	.195	20 AWG solid bare copper	Solid polyethylene	95% tinned copper braid	Black PVC	51.5Ω	66%	3.8 dB
8259	RG-58A/U	.193	20 AWG stranded tinned copper	Solid polyethylene	95% tinned copper braid	Black PVC	50Ω	66%	5.4 dB
8262	RG-58C/U non-contaminating	.195	20 AWG stranded tinned copper	Solid polyethylene	95% tinned copper braid	Black non-contaminating PVC	50Ω	66%	5.4 dB
9258	RG-8X Mini-8	.242	16 AWG stranded bare copper	Foam polyethylene	95% bare copper braid	Black PVC	50	82%	3.1 dB
8214	RG-8/U	.403	11 AWG stranded bare copper	Foam polyethylene	97% bare copper braid	Black PVC	50Ω	78%	1.7 dB
8237	RG-8/U	.405	13 AWG stranded bare copper	Solid polyethylene	97% bare copper braid	Black PVC	52Ω	66%	1.9 dB
8267	RG-213/U non-contaminating	.405	13 AWG stranded bare copper	Solid polyethylene	97% bare copper braid	Black non-contaminating PVC	50Ω	66%	2.1 dB
9913	Low loss semi-flexible RG-8/U	.405	10 AWG solid bare copper	Semi-solid polyethylene	100% bonded foil plus 90% tinned copper braid	Black PVC	50Ω	84%	1.3 dB
9913F7	Low loss flexible RG-8/U	.405	10 AWG stranded bare copper	Gas-injected foam polyethylene	100% bonded foil plus 90% tinned copper braid	Black Belflex®	50Ω	84%	1.5 dB
8241	RG-59/U	.242	23 AWG solid bare copper	Solid polyethylene	95% bare copper braid	Black polyethylene	75Ω	66%	3.4 dB
8213	RG-11/U	.405	AWG 14 solid bare copper	Gas-injected foam polyethylene	97% bare copper braid	Black polyethylene	75Ω	84%	1.3 dB
8238	RG-11/U	.405	18 AWG stranded tinned copper	Semi-foam polyethylene	97% bare copper braid	Black PVC	75Ω	66%	2.0 dB

ROTOR CABLE

8448 Standard duty, 8 wire. Up to 100 ft. runs. Six #22 and two #18 AWG tinned copper conductors. PVC insulation and PVC jacket.

9405 Heavy duty, 8 wire. Over 100 ft. runs. Six #18 and two #16 AWG tinned copper conductors. PVC insulation and PVC jacket.

8484 Standard duty, 4 wire. Four #20 AWG tinned copper conductors. PVC insulation and PVC jacket.

See Belden in the Price Guide

PREASSEMBLED COAXIAL HOOK-UP CABLES (INSTALLED)

9354 50' RG-8/U low-loss foam, PL-259s... **\$54.99**

9355 75' RG-8/U low-loss foam, PL-259s.... **74.99**

9356 100' RG-8/U low-loss foam, PL-259s.. **84.99**

ANTENNA & GROUND WIRE

8000 #14 AWG (7x22) stranded bare copper-covered steel antenna wire.

8018 #8 AWG (solid) soft annealed aluminum ground wire - multiples of 50 ft.

Connecting you to the World

CABLE XPERTS, INC.

FLAT GROUNDING BRAID

Flat, flexible, and tinned for easy soldering. 1" size primarily used for grounding tower legs to ground rods or central point in a shack. From the central point, use 1/2" size to all equipment separately for best protection.

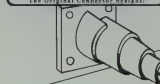
2332 1/2", 10 gauge, rated at 53A per ft. **59¢**

2332 100 100 foot roll of above..... **\$52.99**

235 1", 7 gauge, rated at 85 amps..... per ft. **99¢**

235 100 100 foot roll of above **\$92.99**

COAX-SEAL
THE ULTIMATE GROUNDING SOLUTION



UNV 104 Hand Moldable Plastic for Antenna Component Protection The quick and effective way to seal and protect all types of coaxial fittings, baluns, antenna parts and connectors. Simply wrap it on like regular tape, then mold it to any shape. It adheres tightly to metal, vinyl and polyvinyl coax outer jackets. Stays flexible and sealed at any temperature for years to resist moisture penetration and deterioration. Its permanent flexibility makes it possible to remove and reinstall fittings, then re-seal just by reforming the same material. Non toxic and non-contaminating roll, 1/2" w x 60" ... **\$3.99**

MFJ

MFJ ENTERPRISES, INC.

341S (SO-239)/341M

(NMO) Permanent Mobile Hard Mounts Quality antenna mounts with 14' of RG-58A/U coaxial cable and attached PL-259 connector. Easily snakes around any vehicle to the obtain the best operating position. Perfect for MFJ *RuffRider*™ or other brands of mobile VHF/UHF antennas..... ea. **\$19.99**

WINEGARD®
Clearly the World's Best®



TV-2900 Weatherproof Transformer 82 channel, matching transformer for indoor or outdoor use. Adapts 75Ω coaxial cable with F-connector to terminals of a 300Ω TV antenna, TV set or coupler. Includes F-connector and boot..... **\$2.99**

RG-6 75Ω TV Coaxial

Cable with cellular poly dielectric, #20 copperweld center conductor, 100% aluminum foil shield and 40% aluminum braid shield provides low-loss, good conductivity, flexibility and tensile strength. Weather-proof F-connectors installed.

CX-0625 25 ft. length..... **\$10.99**

CX-0650 50 ft. length..... **15.99**

CX-0675 75 ft. length **19.99**

CX-6100 100 ft. length **24.99**

synthetic textiles, inc.



Black Dacron® Polyester Rope Constructed of strong double braid Dacron® polyester. It's black for UV protection and has excellent resistance to weather, mildew and abrasion. The rope ties and cuts easily and ends seal effectively with the application of a small flame or hot tool.

After a small initial "set" due to tightening of the braid, it has virtually no long term stretch, making it ideal for supporting dipoles, long wires, etc. Also, great for non-resonant guying of masts or towers. When used as an overhead boom support rope for beam antennas, it eliminates a conductive wire from the RF field, which is especially important in VHF/UHF applications.

100' 100 ft., 260+ lbs., 3/32" **\$7.99**

100' 3/16 100 ft., 770+ lbs., 3/16" **16.99**

100' 5/16 100 ft., 1790+ lbs., 5/16" **22.99**

350' 350 ft., 770+ lbs., 3/16" **44.99**

Flex Your Muscles

Use Our Strength

Ready-Made Coaxial Cable Assemblies

RG8/U-Foam PE
 .9db @ 30MHz
 95% braid coverage
 Light weight
 Ultra-violet resistant
 jacket
 With PL259 each end

CXP1318FX
 2.8db @ 450MHz
 Low loss
 Double-shielded
 Non-contaminating &
 direct burial jacket
 With PL259 each end
 or "N" male ea. end

RG8X/Mini Foam
 2.0db @ 30MHz
 95% braid coverage
 Low power
 Small diameter
 Ultra-violet resistant
 jacket
 With PL259 each end

RG213/U Mil-Spec
 1.2db @ 30MHz
 High power capabilities
 Non-contaminating &
 direct burial jacket
 With PL259 each end

For optimum performance from your communications equipment. These precision USA made and tested assemblies will provide years of great service. Guaranteed to perform to specifications. For excellent cabling results, you can depend on CABLE X-PERTS, INC.

jake



Made In USA



Connecting you to the World™

CABLE X-PERTS, INC.
 www.cablexperts.com

See Price Guide for Cable X-perts pricing.

CASTLE RIDGE PRODUCTS, INC.



COPPERWELD® Antenna Wire Forge-welding makes the two metals inseparable! Solid bare copper-over-steel wire – the best for antennas. Very strong, the steel core has very little stretch and long service life. The copper covering provides low RF resistance and solders easily. 12, 14 or 18 gauge.

AN-122	100 ft. #12	\$29.99
AN-123	150 ft. #12	39.99
AN-124	250 ft. #12	59.99
AN-126	500 ft. #12	99.99
AN-128	1000 ft. #12	179.99
AN-142	100 ft. #14	24.99
AN-143	150 ft. #14	29.99
AN-144	250 ft. #14	39.99
AN-146	500 ft. #14	69.99
AN-148	1000 ft. #14	119.99
AN-181	250 ft. #18	17.99
AN-182	500 ft. #18	29.99



ROTARY COAX CABLE STRIPPERS

For quick, clean prep of coaxial cable without damage. Insert coax, turn clockwise 4 or 5 times.

24-7735P	for RG-58, RG-59, RG-62	\$21.99
24-7736P	for RG-6, RG-59, 8281	21.99
24-7739P	for RG-8, RG-11, RG-213	28.99

Used & Demo

Equipment lists

Updated regularly on the web.
 Check them out and order **On-line**



STUF Dielectric Water-proof Connector Filler Seals out moisture. High purity macroscopic foam that dielectrically simulates the coaxial cable core. Fill coax connectors and tighten. The filler material hydraulically channels into all connector voids and points of moisture entry. Non-hardening, easy to remove. No silicones, or other additives to harm coax cable material. (tube) \$4.99

PENETROX™



PENETROX® A Recommended for use on aluminum-to-aluminum and aluminum-to-copper connectors, on bare conductors, and bus bars. Good for all voltages. Assures a high conductivity joint by sealing out air and moisture to prevent corrosion and reformation of oxide film. Apply to mating pieces of antenna components, tubing, etc. during assembly to provide a non-corrosive, low resistance and air tight seal. Makes later disassembly a breeze..... (4oz bottle) \$12.99

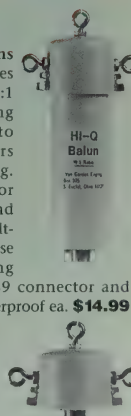
Van Gorden Engineering

BALUNS & INSULATORS

Hi-Q 1:1 or Hi-Q 4:1 Baluns For dipoles, yagis, inverted vees and doublets. Provides 1:1 or 4:1 impedance ratio for matching unbalanced coaxial cable to balanced antennas. Covers 3-40MHz with a 1.5KW rating. Reduces feedline radiation for more power into antenna, and reduced TVI/BCI problems. Built-in DC ground reduces static noise and provides some lightning protection. Convenient SO-239 connector and center support eye hook; weatherproof ea. \$14.99

ANTENNA CENTE Hi-Q Antenna Center Insulator Insulator only, no balun. Replaces egg-type center insulator. Small, rugged, lightweight, weatherproof, SO-239 connector, center supporting eye hook \$6.99

ANTENNA END IN End insulators . pair \$4.99
DOG BONE Antenna insulators each 99¢



LADDER LINE

450 OHM 100	18 ga. 100' insulated	\$14.99
450 OHM 14 100	14 ga. 100' insulated.	29.99
450 OHM 1000	18 ga. 1000' insulated.	109.99
450 OHM 14 1000	14 ga. 1000' insulated.	229.99

WHITE NYLON ROPE

NR-100	100' roll, antenna guy rope	\$4.99
NR-1000	1000' roll, antenna guy rope	44.99

N CONNECTOR

N CONNECTOR Male connector for Belden 9913 and 8214 coax. \$4.99

PREASSEMBLED COAXIAL HOOK-UPS

8X-1.5ST	1.5' RG-8X, silver-tef. PL-259s.	\$7.99
8X-3ST	3' RG-8X w/silver-teflon PL-259s.	8.99
8X-6ST	6' RG-8X w/silver-teflon PL-259s.	10.99
8X-12ST	12' RG-8X, silver-teflon PL-259s	11.99
8X-25ST	25' RG-8X, silver-teflon PL-259s	15.99
8X-50ST	50' RG-8X, silver-teflon PL-259s	24.99
8X-75ST	75' RG-8X, silver-teflon PL-259s	31.99
8X-100ST	100' RG-8X, silver-tef. PL-259s	37.99
213-25ST	25' RG-213, silver-tef. PL-259s.	25.99
213-50ST	50' RG-213, silver-tef. PL-259s.	38.99
213-75ST	75' RG-213, silver-tef. PL-259s.	54.99
213-100ST	100' RG-213, sil-tef. PL-259.	72.99

W2AU FERRITE BALUNS

These baluns replace center insulator and provide a smooth transition from unbalanced coaxial transmission lines to balanced antennas; dipoles, quads and yagis. Produces proper current distribution resulting in reduced feedline radiation for maximum power transfer, gain and reduced TVI/BCI. DC grounded for lightning protection, center eye hook for support. Usable from 1.8-40MHz, 2KW PEP, SO-239 connector.

- W2AU 1:1** 1.1, 1.8-40MHz ferrite **\$24.99**
- W2AU 4:1** 1.1, 1.8-40MHz ferrite **\$24.99**
- W2AU BEAM** 1.1, Beam balun **\$24.99**

W2DU CHOKE BALUNS

High efficiency, transformerless 1:1 baluns. The HF model is the only one available that works on 160 meters! They all handle a VSWR up to 5:1 at the legal power limit, allowing use with antenna tuners. The VHF model eliminates the usual rod and tube hardware balun assembly normally used at those frequencies.

- W2DU-HF** 1:1, 1.8-30MHz choke..... **\$26.99**
- W2DU-VHF** 1:1, 30-250MHz choke **\$26.99**
- W2DU BEAM** 1:1, 40-10MHz choke..... **\$26.99**

REYCO ANTENNA TRAPS

Add traps to your dipole for multiband operation on two to seven bands. Add the 40M pair (KW-40) and get "perfect dipole" performance on 40 and 80M. Add five pair and work 10, 15, 20, 40, 80 and 160M with low SWR.

Selecting traps: List the bands you want to cover, listing the Highest Frequency band first. You will need a pair of traps for each band except the one with the Lowest Frequency.

- KW-10** 10M..... pair **\$41.99**
- KW-12** 12M..... pair **\$41.99**
- KW-15** 15M..... pair **\$41.99**
- KW-17** 17M..... pair **\$41.99**
- KW-20** 20M..... pair **\$41.99**
- KW-30** 30M..... pair **\$42.99**
- KW-40** 40M..... pair **\$42.99**
- KW-80CW** 80M CW pair **\$48.99**
- KW-80F** 80M Phone pair **\$48.99**



HA AN-Insulator™ (left) A strong center dipole insulator with built-in lightning protection. SO-239 connector, 3.5" long x 1.75" dia **\$9.99**

HE END-Insulator™ (right) A shatter-proof antenna end insulator. Tough, includes voltage path extenders, positive wire track. Low loss, lightweight and long leakage path. 5.5" long x 1" dia. pair **\$6.99**



We accept I.M.P.A.C.® Government Credit Cards

Automatic Antenna Tuners & Accessories

Common Tuner Features: • 1.8 to 54 MHz Coverage • Microprocessor-controlled "L" Network analyzes SWR and automatically tunes antennas • Use with all coax-fed dipoles, verticals, etc. • Optional baluns for ladder line and end-fed antennas • 12V DC (nominal) operation • Low power consumption

NEW



AT-100PRO Memory Autotuner - Rated: 0.1 to 125W SSB and CW (50W on 6M). Built-in two-position antenna switch with over 2000 memories for each antenna. LED bargraph shows RF power, SWR and status. Latching relays allow powering-off once tuned. Dim: 7.5" w x 5.5" h x 2.0" d. Weight: 1.5 lbs..... **\$199.99**



AT-1000 Desktop High Power Automatic Antenna Tuner - Rated: 1000W SSB, 750W CW and 500W Digital (100W on 6M). Up/Down push-buttons allow manual fine tuning. Cross-Needle meter simultaneously shows Forward/Reverse Power & SWR. Optional remote head. Dim: 13" w x 3" h x 9" d. Weight: 6 lbs **\$549.99**



RC-1000 Remote Control Head - For the LDG AT-1000. Provides all control. The LED bargraph shows RF power, SWR and status. Includes a 10 ft. cable and mounting bracket. Extends with DB-9 cables to over 100 ft. Dim: 5.5" w x 3" h x 2" d. Weight: 1 lb.. **\$99.99**



AT-897 Automatic Antenna Tuner - A specialized bolt-on tuner for Yaesu FT-897; a good alternative replacement for the Yaesu FC-30. Consumes ZERO power when not tuning, perfect for battery operation. Powers from the FT-897 CAT port. A second CAT port allows simultaneous use of computer control and tuner. Dim: 1.5" w x 3.25" h x 10.5" d, Wt. 2 lbs.. **\$199.99**



MAC-600 Motorized Antenna Controller Microprocessor controlled; works with most 100W radios and 12VDC, 1.8- 54 MHz motorized antennas. Push one button and it automatically finds the lowest SWR. Only a simple connection between radio and antenna for complete control; no magnets or counters needed. The modulated motor drive provides precision speed control, including a special gravity compensation algorithm. Optional interfaces for Alinco, Icom, Kenwood and Yaesu radios. Rated for 10 to 600W. Dim. 5" w x 1.5" h x 3.75" d, Wt. 1 lb **\$139.99**



Z-100 Automatic Antenna Tuner - Power consumption is near ZERO when not tuning, perfect for battery operation. Rated: 0.1-125W (50W on 6M). 200 fast memories. Latching relays allow the Z-100 to be powered off once tuned. Optional interfaces for DC power and control for Alinco, Icom, Kenwood and Yaesu radios. Dim: 5.5" w x 1.5" h x 5.25" d. Weight: 14 oz..... **\$149.99**



RT-11 Remote Mounting Automatic Antenna Tuner - For Mobile, Marine, and remote applications. Weather resistant, ABS plastic enclosure with mounting flanges. Rated: 0.1-125W (50W on 6M). Latching relays allow powering-off once tuned. Optional remote head and interface cables for Alinco, Icom and Kenwood radios. Dim: 8.5" w x 3" h x 5.5" d, Weight: 2.5 lbs **\$199.99**

RT-REMOTE Remote Control Head - Exclusively for the RT-11, allowing control of all functions. Dim: 4.0" w x 2.2" d x 0.8" h, Wt. 1 lb **\$39.99**

INTERFACES

Y-OTT One Touch interface - Plugs into the CAT connector on the back of Yaesu FT-100D, 817, 857 and FT-897. Powers LDG Z-100, AT100Pro, AT-11MP, or MAC-600 directly from the radio (except FT-817), without an additional power source. Press the TUNE button on the tuner and the interface changes the mode on the radio and commands it to transmit. After tuning, the radio is restored to the previous mode. **\$59.99**

K-OTT One-Touch interface Plugs into ANY Kenwood radio that supports the Kenwood AT-300 or AT-50 antenna tuners and provides power and control signals for the LDG Z-100, AT-100Pro, AT-11, RT-11 or MAC-600. Allows the user to activate the tuning sequence or bypass the autotuner right from the front panel of the radio **\$59.99**

INTERFACE CABLES

for the AT-100Pro, Z-100, RT-11 & MAC-600

- AC-1** Power and Control adapter **\$8.99**
- AL-IC1** Alinco 10 ft. Interface Cable..... **\$20.99**
- Icom-IC1** Icom 10 ft. interface cable **\$20.99**
- Icom-IC2** Icom 8 in. interface cable..... **\$8.99**

BALUNS

Tune Balanced Line and Long Wires antennas with LDG Automatic Antenna Tuners* or with any of your own antenna projects. Rated: 200W from 1.8 to 30 MHz. Dim: 2" w x 1.5" d x 4.5" d, Wt. 6 oz. Order **RBA-1:1** (1:1) or **RBA-1** (4:1) .. **\$30.99**

* Except AT-1000



ANTENNA TUNERS

902 Tiny Travel Tuner Only 4.5" w x 2.25" h x 3" d, but rated for 150W. Tunes nearly any coax-fed or random length wire antenna for 80-10M. Perfect for "take along" rigs like IC-706MKII-G, FT-100D, TS-50S, QRP rigs and others with built-in SWR meter **\$79.99**

922 VHF/UHF Dual Band Antenna Tuner Great for HTs, mobiles or amps up to 150W. Using the included tool, adjust your antenna system for a low SWR on VHF, 136-175MHz and UHF, 420-460MHz. Meter reads both SWR and power in 60/150W ranges. 4" x 2" x 1.25" - carry it in your car, while camping, etc..... **\$79.99**

945E Mobile Tuner Covers 1.8-30MHz plus 6M, and rated at 300W PEP. Matches coaxial cable only. Extends mobile antenna bandwidth and eliminates having to stop and adjust the whip length when making frequency changes. Lighted cross-needle SWR bridge and power meter with 50/300 and 5/30W ranges. 8" w x 2" h x 6" d..... **\$99.99**

941E Versa Tuner II Covers 1.8-30MHz and rated at 300W PEP. Matches everything! - coaxial fed dipoles, vees, whips, verticals, beams, random wires, balanced lines. Built-in 4:1 balun. Lighted cross-needle SWR/power meter with 300/50W and 30/5W ranges. 8-position antenna selector for 2 coax lines, random wire or balanced line or an external dummy load. 10.625" w x 2.875" h x 7" d..... **\$109.99**

934 Antenna Tuner/Artificial Ground Makes a random wire an effective antenna. Combines best features of 941E and 931 into one. Full-featured 1.8-30MHz, 300W tuner with cross-needle meter and ground matching knob that lets you switch in inductance to bring an attached random length wire to a low impedance current point, forming an artificial ground. 10.625" w x 3.5" h x 7" d..... **\$169.99**

948 All the features of the 941E without the dummy load. Has larger lighted peak reading cross-needle SWR/power meter **\$119.99**

949E Deluxe Versa Tuner II Same power, tuning and switching capability as the 941E with a larger, lighted peak or average reading cross-needle SWR/wattmeter. *PreTune™* allows off-air tune-up into a built-in 50Ω dummy load. 10.625" w x 2.875" h x 7" d..... **\$139.99**

969 Deluxe Versa Tuner II Covers 6-160M and rated at 300W. Features a roller inductor coil with a spinner knob and 3-digit turns counter. Lighted peak/average reading cross-needle SWR/wattmeter with 30/300W ranges. Tunes coaxial cable, random wire or balanced feedline, has a built-in 4:1 balun. QRM-Free *PreTune™* allows off-air tune-up into a built-in 50Ω 300W dummy load. Convenient 8-position antenna selector switch. 10.5" w x 3.875" h x 9.5" d..... **\$189.99**

962D Versa Tuner III Covers 1.8-30MHz and rated at 1.5KW PEP. Matches coaxial fed antennas, random or balanced line. Has a built-in 4:1 balun. Lighted peak/average cross-needle SWR/wattmeter with 200/2000W ranges. 6-position selector for 2 coax lines (direct or thru), random and balanced lines. 10.5" w x 3.875" h x 15" d..... **\$249.99**

986 Differential-T Tuner™ Covers 1.8-30MHz, rated at 3KW PEP. Uses a broadband T-network with roller inductor and differential capacitor. Tunes most antennas using only two knobs. Lighted peak or average reading cross-needle SWR/wattmeter with 200/50W and 2000/500W ranges. Inductor spinner knob, 3-digit turns counter, 6-position antenna selector, external dummy load switch, 4:1 balun. 10.75" w x 4.5" h x 15" d..... **\$299.99**

989C Versa Tuner V Covers 1.8-30MHz, rated at 1.5KW PEP with heavy-duty components. Matches nearly every type of antenna. Roller inductor with spinner knob and 3-digit turns counter. Lighted peak/average reading cross-needle SWR/wattmeter with 200/2000W ranges. Built-in 50Ω 300W dummy load, heavy-duty 4:1 balun and 6-position antenna selector switch. 10.75" w x 4.5" h x 15" d..... **\$319.99**

993 IntelliTuner™ 300W Auto Tuner Measures, calculates, then automatically tunes. Remembers most balanced/unbalanced antenna from 1.8-30MHz to 300W SSB or 150W CW. Cross-needle meter shows forward/reflected power and SWR. Digital LCD shows antenna selection, frequency, and more. Manual tuning possible without transmit. • 4:1 current balun • Matches 6 to 1600Ω • Audible SWR indicator • 2-position antenna switch • 10" w x 2.75" h x 9" d..... **\$239.99**

991 IntelliTuner™ 150W Auto Tuner Similar to 993, but rated 150W SSB/100W CW. No digital LCD, audible SWR indicator, antenna switch or 4:1 current balun. Matches 6 to 3200Ω..... **\$199.99**

994 IntelliTuner™ 600W Auto Tuner 600W SSB/300W CW 993 (looks like 991), but no digital LCD, audible SWR indicator, antenna switch or 4:1 current balun. Matches 12 to 800Ω. Low power tuning with any external amp bypassed **\$329.99**



974H Balanced Line Tuner Matches 50Ω output transceivers to virtually any balanced-line fed antenna. Peak and average forward power, reflected power, and SWR are displayed on a 3 inch illuminated cross-needle meter. Matching Range: 12-2000 ohms continuously from 1.8-54 MHz. Power: 300W SSB PEP transmitter output and 150W CW. Features a fully balanced wide range T-Network using four gear driven 1000V air variable capacitors and a high-Q air wound tapped inductor for 80-10 meters; separate inductors are used for 6 and 160 meters. A 1:1 current balun is incorporated in the low impedance 50 ohm input side to convert the balanced T-Network to unbalanced operation. Rear panel connectors for coaxial and single or two wire feedlines. 7.5" w x 6" h x 8" d..... **\$189.99**

974 Balanced Line Antenna Tuner - Same as the 974H but 3.5-54MHz (no 1.8 MHz) **\$169.99**



1703 Antenna/Transmitter RF Safety Switch Connects two rigs and two antennas, and switches between the two. Designed to keep your transceiver from transmitting while not terminated. Usable from 1.8-30 MHz and is rated at up to 300W PEP SSB/150W CW on 50-75Ω unbalanced lines. All metal cabinet with mounting tabs **\$19.99**

VECTRONICS



ANTENNA TUNERS

VC-300M Mobile Tuner Compact and lightweight for base or mobile use. Tunes verticals, dipoles, inverted Vs, beams and mobile whips fed by coaxial cable. Covers 1.8-30MHz at 300W continuous power. The dual-movement cross-needle meter simultaneously monitors RF power output and SWR. 7.25" w x 3.5" h x 8.75" d, 2.5 lbs **\$99.99**



VC-300DLP Antenna Tuner A quality, economical tuner. Covers 1.8-30MHz at 300W continuous power capability from 3.5-30MHz and 150W on 1.8 MHz. Built-in dummy load, dual-movement cross-needle peak or average reading meter. Compatible with most antennas - coax-fed, balanced or single wire. Built-in 4:1 balun and 6-position antenna switch. 10.25" w x 9.5" d x 3.5" h, 3.5 lbs.. **\$149.99**

SSB/100W CW. No digital LCD, audible SWR indicator, antenna switch or 4:1 current balun. Matches 6 to 3200Ω..... **\$199.99**



Palstar, Inc. high quality, antenna tuners designed by Hams for Hams. American made, solidly constructed and built to last.

AT-1KM Antenna Tuner Featuring differential capacitor tuning with two stators and one rotor. Ease of use utilizing only two controls to operate for tuning with a precision ceramic body roller inductor and high power balun. • 1.8-30MHz • 1200W SSB • Palstar designed ceramic roller inductor • Wide impedance matching range • Illuminated cross-needle SWR/wattmeter • 0-300W/0-3000W ranges • High-power 4:1 balun • Powder coated front panel and top cover • 10.5" w x 4.5" h x 11" d, 8 lbs..... **\$359.99**

AT-1500CV

T-type Antenna Tuner that can handle up to 1500W PEP with low profile construction. Features edge-wound, silver-plated, roller inductor for high power use. • 1.8-30MHz • Matches dipoles, center-fed dipoles, G5RV's balanced feeders, verticals, single wire, delta loops, beams, windoms, inverted V's • Built in 4:1 balun for balanced feeders • 6-position antenna selector switching and bypass position for straight-thru use with SWR and power monitoring • Average reading to 3000W • Lit cross-needle SWR/wattmeter • 12.5" w x 4.5" h x 12" d, 10 lbs..... **\$459.99**

AT-1500BAL

Double L Balanced Antenna Tuner High power, dual-roller inductor antenna tuner with balanced output. • 160-10M • 1500W PEP • 2 edgewound, silver-plated, ball bearing drive, roller inductors crank handle, driven synchronously with toothed fiberglass belt • 44uH total inductance for extended 160M • Switchable 500pf fixed capacitor (160M) • 160-20M 2500 ± j2500, 15M 1000 ± j1000, 10M 500 ± j500 impedance • New low minimum variable capacitor @ 460pf/4.5Kv with vernier drive • 12.5" w x 6.5" h x 15" d, 16 lbs..... **\$695.99**

AT-4K

T-Match Network Tuner The typical unbalanced, 4:1 balun tuner exposes the balun to impedance and reactance that it's not designed to handle. The AT4K utilizes a 1:1 unbalanced-to-balanced transformer at the input. When properly tuned, a 50Ω impedance will be presented both to in and output. • 2500W single tone continuous • Unbalanced/balanced output with high-power balun at input • T-Match circuit (8 to 2000Ω) • Custom, large value (500pf), variable capacitors (6kV rated) • 10 Amp, edge-wound, solid copper, silver-plated roller inductor • Cross-needle SWR/wattmeter • 7" h x 15" w x 16" d, 20 lbs.... **\$895.99**



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HEAR
ME?



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Then use the **SGC Smartuner™**— the Essential link between your HF transceiver and antenna. Matching at the transceiver is good, but matching at the antenna is better. SGC Smartuners are designed to do just that. They operate completely independently to provide the best match between the feed line and the antenna, eliminating SWR problems completely.



SGC-231 Coupler

2nd, 8-14-97

SGC Smartuners

are designed to work with any transceiver and any antenna. They are fully automated, intelligent enough to select the best match between feed line and antenna in seconds and remember it so it can recall that match in milliseconds. The Smartuner sets the standard. It is the original and still the best.

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Smartuner!*

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SGC, Inc. 13737 SE 26th St.
Bellevue, WA 98005



Your HF Solution



ANTENNA TUNER

ATR-30 True Legal Limit™ Antenna Tuner Covers 1.8–30MHz, including MARS and WARC. Designed for sustained RF output over 1500W CW and 3000W SSB, also 160M. Uses High-Q, high-current, edge-wound, arc-free roller inductor with heavy duty 500pf capacitor in T-match network. Matches most antennas using either coax or balanced feedlines. Cross-needle, peak-reading SWR/wattmeter, 3000/300W ranges, measures peak/average forward/reflected power plus VSWR, illum. Includes 3-core choke balun, 6-position antenna switch and 6:1 vernier reduction drives, turns counter. Requires 12VDC or internal 9V. **\$549.99**

REMOTE CONTROLLED ANTENNA SWITCHES

RCS-4 Select up to 4 different HF antennas by supplying control voltages thru the coax without the need for a separate control line. The weatherproof switch box can be tower, mast or wall mounted. Uses 3 heavy duty 10A contact relays on a fiberglass circuit board 5.25" d x 7" w x 3" h. Safe, 14VDC control. Indoor control console locates at operating position. 6" d x 6" w x 2.5" h. 120VAC. Rated 1.8–30MHz, 2KW. **\$129.99**

RCS-8V Independently or simultaneously select up to 5 different antennas using one coaxial feedline and 8-wire control cable. Internal wiring allows grounding or floating unused terminals as required. Rated at 5KW below 30MHz, and 1KW up to 150MHz. **\$139.99**

RCS-8VN Same as RCS-8V but with N-type female connectors. **\$149.99**

RCS-10 Select up to eight HF antennas using one feed line and a single four conductor control line (not supplied). Long life sealed relays with 16A current rating. Up to 100MHz with low VSWR. Over 5KW below 30MHz (matched). **\$149.99**

Palomar Engineers

PT-340 Tuner Eliminate QRM, overheated final tubes & devices by adjusting the station antenna tuner without transmitting. Installs permanently between rig and tuner. Just turn on, and listen to the noise output in a receiver, then adjust the station tuner controls for a dip in the noise (a null). Covers 1.7–30MHz. Uses 9V battery, 6" w x 5" h x 3" d. **\$99.99**

ICOM

AH-2B Antenna Element Provides 7 through 50MHz mobile operation when used with the AH-4 antenna tuner. Includes hardware for mounting to a tow bar, 8.2 ft. antenna. **\$299.99**



AH-4 Automatic Antenna Tuner Fully automatic – covers 3.5MHz–54MHz with a 23' or longer wire antenna, or 7–54MHz with optional AH-2B element. It measures 6.7" w x 2.7" h x 9" d for easy installation in a variety of locations. Weather-resistant construction, using rubber gasket seals, enables operation in all conditions. Handles 120W PEP, requires only 5–15W for tuning. Designed for use with Icom HF transceivers. Just push the [TUNER] switch and the AH-4 auto adjusts to the minimum SWR in less than 2.5 seconds. Up to 45 memories store settings to provide 1-second retuning. Supplied with mounting kit, 16' control and coaxial cables, PL-259s. Requires 13.8 VDC. **\$259.99**

DAIWA

CS-201 2-Position Coaxial Switch A high quality coaxial switch with excellent high frequency RF characteristics due to cavity and heavy diecast metal construction. Frequency range up to 600MHz with less than 0.12 VSWR, less than 0.2dB insertion loss and 60dB isolation between terminals. Rated at 2.5 KW PEP or 1KW CW. Auto grounding of unused terminals, SO-239 connectors. **\$26.99**



PT-3 Preamplifier Covers 2–54MHz and useable with either a receiver or transceiver. A tunable low noise dual-gate FET circuit provides >20dB gain, low N.F. and improved spurious and image rejection. An RF sensed switch with variable delay automatically bypasses to antenna on transmit. Second receiver or antenna capability. 12V DC, or use P-12T AC adapter (\$9.99). 2.5" h x 8.75" w x 6.5" d. **\$124.99**



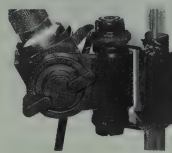
TPA Tunable Preamp/Active Antenna Use as a preamplifier to improve receiver gain, or as an indoor active antenna. Covers 0.22–30MHz in 5 bands. A dual-gate FET device provides an excellent N.F. and >20 dB gain. As a preamplifier, the input matches most antennas; long wire, 300Ω and random lengths. When no external antenna is available, the preamplifier's built-in 30 in. collapsible whip gives great results. Uses 9V battery or P-9T AC adapter (\$9.99). 1.5" h x 8" w x 6.5" d. **\$76.99**

MFJ

MFJ ENTERPRISES, INC.

ANTENNA MOUNTS

310 HT Antenna Window Mount Clip Your HT rubber duck antenna radiates poorly inside your car due to the shielding effect of the roof, doors, etc. Detach the duck from your HT and install on this handy BNC window mount clip. It holds your antenna securely on the outside of your car's window where it can radiate freely. Quick and easy to install and remove. Comes with 10' of flexible mini-coaxial cable. **\$14.99**



340 Mirror or Luggage Mount For mounting VHF/UHF and medium-size HF antennas on mirror, luggage rack or spare tire carrier of truck, van, RV or SUV. **\$34.99**

345 Trunk/Hatchback Lip Mount Mounts on any lip on your vehicle. An extra-wide 4-inch lip and large reinforcing tabs on each side safely distributes the load. Mounts at any angle and allows at any desired angle. **\$34.99**



COAXIAL SWITCHES

1700C Antenna and Transceiver Switch with Lightning Protection Up to 6 antennas and 6 rigs in any combination. Leave in line to operate with any combination 50 or 75Ω. Handles 2kW PEP or 1kW CW (1.8–30MHz). 10" w x 3" h x 1.5" d. **\$89.99**



1701 Antenna Switch Six positions, for 50–75Ω systems. Rated for 2KW PEP or 1KW CW from 1.8–30MHz. Unused positions are grounded for lightning protection. 10" w x 3" h x 1.5" d. **\$59.99**

1702C Antenna Switch 2 positions + center ground. 50Ω, rated to 500MHz with <0.2dB loss, 2.5kW PEP or 1kW CW. >60dB isolation @ 300MHz or >50dB @ 450MHz. Unused terminal auto grounds for lightning protection. **\$24.99**

1702CN Lowest loss on UHF. Uses Type N connectors which are good up to 1.1GHz. **\$34.99**

1704 Antenna Switch 4 positions + center ground. 50Ω, rated to 500MHz with <0.2dB loss, 2.5kW PEP, 1kW CW, >50 dB isolation @ 500MHz. Includes replaceable lightning protection. **\$64.99**

1704N with Type N's. **\$74.99**



DUPLEXERS

Type	S0239 PL259/PL259	S0239 PL259/Nfemale	S0239 S0239/S0239	S0239 PL259/PL259	S0239 PL259/Nfemale	Nfemale PL259/Nfemale	PL259 S0239/S0239
Leads	No	No	No	Yes	Yes	No	Yes
2m/440	Comet CF4160K Diamond MX72D MFJ 916	Comet CF4160I	Comet CF4160J	Comet CF416A Comet CF530 Diamond MX72H	Comet CF416B Diamond MX72N Yaesu AD3	Comet CF416C Comet CF416W	
2m/220	Diamond MX214D			Comet CF142			
HF/6 to 440				Comet CF360A			Comet CF360B
HF to 6/2m				Comet CF706A Diamond MX62M			

TRIPLEXERS

Type	Leads	HF/6/2/440/1200	HF/6/2/440	2/220/440
Nfemale PL259/PL259/Nfemale	No	Comet CFX4310C		
S0239 PL259/PL259/PL259	Yes	Diamond MX2000	Comet CFX514	Comet CFX324A Diamond MX324
S0239 PL259/PL259/PL259	No		Comet CFX5140	Comet CFX324B Diamond MX324D
Nfemale PL259/PL259/Nfemale	Yes	Diamond MX3000		
S0239 PL259/PL259/Nfemale	Yes		Comet CFX514N	
S0239 S0239/S0239/S0239	No		Comet CFX514J	

Kleinhuis

1309 Isolated Ground Bar For grounding data patch panel racks & marine applications. Provides additional panel, sub-panel or control panel grounding. Lay-in style. Adapts easily for design/build applications, mounts to back panel or wall surface. Corrosion resistant, nickel-plated, copper clamping rail. Includes locking protective hinged cover. UL listed, CSA approved. 600V max. Accepts 8-12 (AWG) stranded or solid copper wire. 7.5" w x 1.75" h **\$14.99**



Ladder-Loc® Center Insulator & Support Provides convenient attachment of 450Ω ladderline to various dipoles. Minimizes feedline flexing at the antenna feedpoint and ensures a long lasting, trouble-free installation. A top attachment point is provided for attaching a center support rope. UV stabilized for long life **\$12.99**

W4RT

ANTENNA BOSS Motorized Antenna Controller Makes essentially any motorized antenna "look like" the Yaesu ATAS-100/120 to the Yaesu FT-100/D, 847, 857, and FT-897 radios, allowing use of the radio's TUNE button for automatic tuning. Works with 6-12VDC motors, no special sensors in the antenna required, no programming or computer required. Works to full legal limit and fine with antennas having a shunt coil. Radio powers both the BOSS and antenna motor **\$179.99**



MFJ MFJ ENTERPRISES, INC.



931 Artificial Ground Unit Eliminates problems caused by inadequate grounding when using random length wire antennas. It resonates an additional length of wire to act as a tuned counterpoise. It results in easier tuning, improved efficiency, a better radiation pattern and reduced TVI/RFI. Covers 1.8 to 30MHz, RF ammeter tuning indicator. 7.5" w x 3.5" h x 7" d. Not for coax fed antennas **\$89.99**

270 Lightning Surge Protector Safeguard ham gear from damage due to static charges & lightning induced surges. Replaceable ultra-fast gas discharge tube safely shunts up to 5000 amps of peak impulse current to an independent ground. Rated to 400W PEP, usable up to 1000MHz **\$29.99**



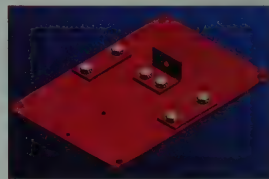
1925 Controller for Yaesu ATAS-Series Antennas A handy in-line switch that controls the motorized up/down tuning function of Yaesu screwdriver antennas by putting the DC control voltage on the center conductor of the coax. Works with most rigs except the Icom IC-706 series, which requires a special control cable. When the up/down switch is pressed, the 706 will transmit 10W CW while monitoring for lowest SWR. When switch is released, the 706 returns to previous mode and power (order model 1925I2) ea. **\$59.99**



GROUNDING ACCESSORIES

GBIS18114AE 1/8" Copper Entrance Ground Bar Kit Installs at shack entrance, making a short connection to the ground system. Holds up to five PolyPhaser IS-50-type lightning protectors. Insulated stand-off brackets allow attaching and insulating of ground bar from mounting surface. Two HD terminal lugs and hardware included. Attach grounding wires from 1/0 stranded to #6 solid **\$27.99**

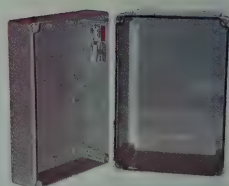
GEL3AE Pkg. of 5 HD terminal lugs **\$15.99**



GP1868.78AE

1/8 in. Copper Single Point Ground Panel Kit Provides single-point grounding for two transceiver lines and rotor control cable. Installs at tower base or on outside wall. Sized to fit inside a NEMA-4X style box for weather proofing. Tapped holes and hardware provided for mounting a PolyPhaser IC-RCT rotor control protector and up to two IS-50 series coaxial protectors. Sandwich plates and hardware included **\$54.99**

GBX976AE NEMA 4X Waterproof Enclosure (right) Accepts GP1868.78AE ground panel **\$89.99**



GBIS18148AE 1/8" Copper Station Ground Bar Kit Installs at back of operating desk. Grounds individual components to a common point preventing multiple ground paths and daisy-chains. Accepts a heavy ground conductor to be routed to station ground or entrance ground bar. Includes two heavy 12 in. straps for equipment and two light duty 1/4 in. straps for accessories, plus an extra 1/4" strap and lugs for added assemblies **\$64.99**



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PolyPhaser[®] CORPORATION

The primary rule for protecting ham radio equipment against lightning damage is connection of all elements to a single, low impedance, ground system within the ham shack. This includes antenna, antenna support (pole, tower, etc.), and all station protectors (antenna, power, telephone, rotor, etc.).

BROADBAND COAXIAL PROTECTORS

Hermetically-sealed gas tubes and additional components assuring surge voltages and currents that are formed differentially on coaxial cable are prevented from being shared by valuable equipment. DC blocked for maximum protection. • Low loss • Multi-strike capability with low strike throughput energy • Aluminum enclosure • Wide frequency range, low VSWR • Works on all equipment • Silver-center, TFE, UHF connectors • Silver shell and gold pin Type-N

Flange Mount (left)

IS-50UX-C0

1.5-400MHz • HF 2kW, VHF 375W, UHF 125W • UHF connector..... **\$61.99**

IS-50UX-C1

50-700MHz • VHF 375W, UHF 125W • UHF connector..... **\$61.99**

IS-50NX-C2

125-1000MHz • VHF 375W, UHF 125W/50W (low/high) • Type-N conn **\$61.99**

Bulkhead Mount (right)

IS-B50LU-C0

1.5-400MHz • HF 2kW, VHF 375W, UHF 125W • UHF connector..... **\$64.99**

IS-B50LU-C1

50-700MHz • VHF 375W, UHF 125W • UHF connector..... **\$64.99**

IS-B50LN-C2

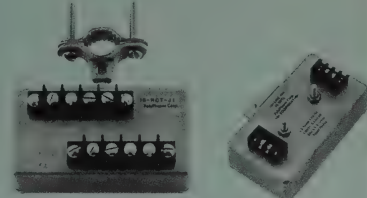
125-1000MHz • VHF 375W, UHF 125W/50W (low/high) • Type-N conn **\$64.99**

LOW INDUCTANCE COPPER STRAP

A larger surface area and lower inductance gives strap a huge advantage over wire for RF grounding and lightning protection. Cannot be fused open by lightning. Usable above or in-ground, #26 AWG thickness. Available in 1.5" or 3" widths and 25', 50' or 100' rolls. See Price Guide for details.

GROUNDING PANEL

CU-SPGP A heavy 0.062" copper plate mounted on 1/2" plywood. For mounting protectors and establishing the important single grounding point for all station equipment. Comes with concrete anchors, mounting screws, two rolls of 10' x 1.5" copper grounding strap and 2 copper, 18" w x 12" h, sandwich bars, 16" on-center mount **\$69.99**

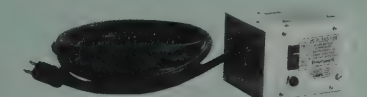


ROTOR CONTROL PROTECTOR

IS-RCT (left) 8-wire protection for rotor box and nearby equipment. Water tight with mounting stud. Shown with optional J-1 clamp **\$54.99**

IN-LINE PHONE LINE PROTECTOR

IS-SPTL (right) Multi-stage protection for telephone trunk lines. Handles ring voltages up to 105V, surges up to 36kA **\$57.99**



POWER LINE EXTENSION PROTECTOR

In-line, multi-stage protectors provide multi-stage line protection, filtering and proper grounding for a 120V AC line. 2 grounded outlets, power switch, and circuit breaker. All aluminum grounded enclosure, 4.75" wide.

PLDO-120US15A 15', 120V/15A **\$159.99**

PLDO-120US20A 6' cord, 120V/20A.. **\$199.99**



MOUNTS

MB-8PST Permanent Brass Hole Mount (NMO) Quality brass alloy, silver-soldered ground lug. Mounts in 3/4" hole. Comes with 17' RG-58A/U stranded cable, Teflon® PL-259 connector . **\$15.99**

GB-8PST NMO Magnetic Mount For temporary vehicle installs. Strong (90 lbs. pull), protective mylar sole prevents scratches. With 12' RG-58A/U cable and Teflon® PL-259 connector **\$29.99**

LBMB-9034 "L" Bracket for Mirror Mount Strong, extruded aluminum. Accepts various 3/4" hole mounts. Black (plain pictured)..... **\$10.99**

VTPM Plate Mount 1" thick NMO plate mount (UHF barrel) **\$15.99**



FULL BODY CLIMBING HARNESSES

SkyClimber™ (left) Chest-high front D-ring for fixed climbing. Made of polyester, easy on/off. Two D-ring harnesses offer sliding D-ring at center of back, and chest-high front D-ring. Four D-ring harnesses have sliding D-ring at center of back, chest-high front D-ring, and D-ring on each hip.

FP-5600 Two D-ring, 2.7 lbs., S-M **\$89.99**

FP-5601 Two D-ring, 2.8 lbs., L-XL **89.99**

FP-5602 Four D-ring, 3.0 lbs., S-M **106.99**

FP-5603 Four D-ring, 3.2 lbs., L-XL **106.99**

StarClimber™ (right) Six D-ring tower saddle harnesses with padded seat and shoulder straps, and removable tool belt. Sliding D-ring at center of back, chest-high front D-ring, D-ring on each hip and each end of seat strap, black 1.75" nylon tongue buckle leg strap, red 1.75" polyester shoulder straps, two accessory rings attached to 5" padded backpack and seatstrap, and carry-all bag.

FP-6600 5.0 lbs., extra small..... **\$260.99**

FP-6601 5.1 lbs., small..... **236.99**

FP-6602 5.2 lbs., medium..... **236.99**

FP-6603 5.3 lbs., large **236.99**

FP-6604 5.4 lbs., extra large **236.99**



UPS SHIPPABLE



The use of a self-supporting antenna mount makes a neat and attractive installation without guy wires. EZ-Ups are Heavy-Duty and Self-supporting - made out of 1-1/4 in. tubular steel with triple corrosion protection inside and out. Double embossed collars with six locking screws hold masts up to 1-3/4 in. Fast, one-person installation, the legs extend to any rafter spacing. Shipped completely assembled and includes a pitch pad kit and lag screws.

EZ 48-3ABX (right) 3 ft. high, 8.5 lbs..... **\$24.99**

EZ 48-5ABX (right) 5 ft. high, 12 lbs..... **\$34.99**

EZ 5-16 5' 16 ga. steel mast (Pick-up only) **\$7.99**

EZ 29-24S Heavy-duty Double-strap Chimney Mount (left) Mount includes two "Y" type mounts and 24' of stainless steel strap..... **\$17.99**

Lightning Protectors Employ gas-tube protection to isolate equipment from surges. Gas-tube holder unscrews providing simple gas-tube replacement. Both models are weatherproof, may be bulk head mounted, or flange mounted using the included bracket. Machined construction, gold pin teflon female connectors. Rated 1600W. 2.5" x 1" dia.

SP-U UHF female connectors • DC to 600MHz range • 0.1dB insertion loss **\$39.99**

SP-N Type-N female connectors • DC to 2.5GHz range • 0.2dB insertion loss **\$39.99**

AP Replacement gas-tube protector..... **\$9.99**

CRANK IT UP!

MA SERIES CRANK-UP TUBULAR TOWERS

The premier MA-Series towers are designed to be both safe and neighbor-friendly. The slender design gives a clean flagpole-like appearance while allowing antennas from 15.3 to 22 sq. ft. in 50mph winds, depending on the model.

Model	Height max./min.	Sections	Weight (in lbs.)	Section OD top/bottom	Base	Price
MA-40	40'/21'6"	2	242	3"sq./4.5"	3'x3'x4'6"	\$1049.99
MA-550*	55'/22'1"	3	435	3"sq./6"	3.5'x3.5'x5'	\$1619.99
MA-770*	71'/22'10"	4	645	3"sq./8"	5'x5'x5'6"	\$2639.99
MA-850*	85'/23'6"	5	943	3"sq./10"	5'x5'x6'	\$4069.99

*Also available as tower/heavy-duty motor drive (positive pull down) package. Requires purchase of MCL-100 limit switch control or RMC-1000 remote control. 770 and 850 require MAB or MARB series base.

FREE STANDING "LOW-PROFILE" CRANK-UP LATTICE TOWERS

The compact TMM Series are designed to offer an alternative for clients in height restricted areas. These towers have a minimum retracted height of 11'4" to 12' (depending on rotor). Visual impact is reduced and antenna servicing is made easier. The TMM Series are light-weight, freestanding, and allow up to 50 sq. ft. of antenna in 50mph winds.

Model	Height max./min.	Sections	Weight (in lbs.)	Section OD top/bottom	Base	Price
TMM-433SS	33'/11'4"	4	315	10"/18"	4'x4'x4'6"	\$1379.99
TMM-433HD*	33'/11'4"	4	400	12.5"/21.5"	4'x4'x5'	\$1669.99
TMM-541SS*	41'/12'	5	430	10"/21.625"	4'x4'x5'	\$1809.99

*Will accept the MDP-750 motor drive, factory installed only.

FREE STANDING CRANK-UP LATTICE TOWERS

The standard duty TX Series are as strong or stronger than most competitors' heavy-duty models. They have 21' sections with 4' overlap to provide extra height, as well as to help prevent binding in high winds. The TX Series comes complete with rotor plate and base hardware and require no guying. All bases will accept the TRX Series raising fixtures.

Model	Height max./min.	Sections	Weight (in lbs.)	Section OD top/bottom	Base	Price
TX-438	38'/21'6"	2	355	12.5"/15"	5'x5'x5'	\$1299.99
TX-455	55'/21'6"	3	670	12.5"/18"	5'x5'x6'	\$1799.99
TX-472*	72'/22'8"	4	1040	12.5"/21.625"	5'x5'x6'6"	\$2939.99
TX-489MDPL**	89'/23'4"	5	1800	12.5"/25.625"	5'x5'x8'	\$7659.99

*Also available as a tower/heavy-duty motor drive (with positive pull down) package. Requires purchase of MCL-100 limit switch control or RMC-1000 remote control. **Comes with heavy-duty motor drive with dual level wind and positive pull down. Requires purchase of MCL-100 limit switch control or RMC-1000 remote control.

FREE STANDING HEAVY-DUTY CRANK-UP LATTICE TOWERS

The HDX Series heavy-duty telescoping towers have up to 2-1/2 times more wind loading capacity than others (up to 70 sq. ft. at 50mph). This allows for large stacked arrays, while using commercial-type bases and anchor bolts. All T-bases can utilize the TRX Series raising fixtures, allowing the tower to hinge. None of the lattice style towers require guying.

Model	Height max./min.	Sections	Weight (in lbs.)	Section OD top/bottom	Base	Price
HDX-538	38'/21'6"	2	600	15"/18"	5'x5'x6'	\$1539.99
HDX-555	55'/21'6"	3	870	15"/21.625"	5'x5'x6'6"	\$2679.99
HDX-572MDPL*	72'/22'8"	4	1600	15"/25.625"	4'x4'x8'	\$7019.99
HDX-589MDPL*	89'/23'4"	5	2440	15"/30.625"	5'x5'x8'	\$9189.99
HDX-5106MDPL*	106'/24'8"	6	3805	15"/37.125"	5'x5'x9'	\$19299.99

*Includes heavy-duty motor drive with dual level wind and positive pull down. Requires purchase of MCL-100 limit switch control (included with 589MDPL and 5106MDPL) or RMC-1000 remote control.



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UNIVERSAL TOWERS

ALUMINUM, FREESTANDING, SELF-SUPPORTING AT RATED LOAD

Universal offers 10-foot easy-to-assemble sections or complete towers ranging from 30 to 100 feet with a choice of wind load ratings and accessories. The lightweight, rust-free, strong, aluminum sections are equilateral, triangular, welded trusses available in 11, 14, 18, 22, 26 or 30-inch widths. To choose the proper tower: a) Determine the projected surface area of the mountable antenna. This figure is often found in the accompanying antenna literature. If not, use the following standards: standard TV antennas = 2 sq. ft. in area; 6/10 meter beams and large TV antennas = 5 sq. ft.; 20/40 meter beams = 9 sq. ft.; large 20/40 meter beams or multiple antenna arrays = 18-26 sq. ft. (when using a rotator, add 1 sq. ft., plus 1 sq. ft. for the mast, to the antenna size) b) Decide on the desired tower height. (sectional towers provide the option to add height later) c) Choose a model based on height and windload. Model numbers are merely wind load followed by height. [eg. Model 5-50 = 5 sq. ft. wind load + 50' desired height]

hy-gain[®] ROTATORS

... the first choice of hams around the world!



The HAM-IV

is the most popular rotator in the world! It is designed for medium communications arrays of up to 15 sq. ft. wind load area. Low temperature grease permits normal operation down to -30° F. New alloy ring gear gives extra strength up to 100,000 PSI for maximum reliability. The indicator potentiometer leads have ferrite beads to reduce RF susceptibility. For convenience a Cinch® plug connector is used at the rotor plus an 8-pin plug at the control box. Dual 98 ball bearing race for load bearing strength and electric locking steel wedge brake prevents wind induced antenna movement. North or South center meter scale. Maximum mast size: 2.063 in. **\$529.99**

ferrite beads to reduce RF susceptibility. For convenience a Cinch® plug connector is used at the rotor plus an 8-pin plug at the control box. Dual 98 ball bearing race for load bearing strength and electric locking steel wedge brake prevents wind induced antenna movement. North or South center meter scale. Maximum mast size: 2.063 in. **\$529.99**

HAM-IV Specifications

Wind Load cap.(inside tower)	15 square feet
Wind Load (w/mast adapter)	7.5 square feet
Turning Power (in lbs.)	800
Brake Power (in lbs.)	5000
Brake Construction	Electric Wedge
Ball Bearing Assembly	Dual race/96 bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8 (Belden 8448 or 9405)
Shipping Weight (lbs.)	24
Effective Moment (in tower)	2800 ft/lbs.

The TAILTWISTER SERIES II



is designed for medium communications antenna arrays of up to 20 sq. ft. wind load area. Available with DCU-1 Pathfinder Digital control box (T-2XD) or standard Analog control box (T-2X). Low temperature grease, alloy ring gear, indicator potentiometer, ferrite beads on potentiometer wires, weatherproof AMP connectors plus 8-pin plug at the control box. Triple bearing race with 138 ball bearings for large load bearing strength, electric locking steel wedge brake, North or South center meter scale, low voltage control. Maximum mast size: 2.063 in. **T-2X** with analog control **\$619.99**
T-2XD with DCU-1 control **\$979.99**

TAILTWISTER Specifications

Wind Load cap.(inside tower)	20 square feet
Wind Load (w/ mast adapter)	10 square feet
Turning Power (in lbs.)	1000
Brake Power (in lbs.)	9000
Brake Construction	Electric Wedge
Ball Bearing Assembly	Triple race/138 bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8 (Belden 8448 or 9405)
Shipping Weight (lbs.)	28
Effective Moment (in tower)	3400 ft/lbs.

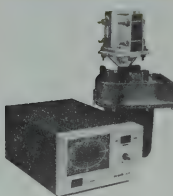


THE HAM-V

Designed for medium communications antenna arrays of up to 15 sq. ft. wind load area. Includes the innovative DCU-1 Pathfinder control unit. A strong 100,000 p.s.i alloy ring gear and a new indicator potentiometer have been added for improved reliability. For convenience, a Cinch® connector is used at the rotor and an 8-pin plug at the control box. Ferrite beads reduce RFI. Powder coated finish. Max. mast size: 2.063 in. **\$899.99**

HAM-V Specifications

Wind Load cap.(inside tower)	15 square feet
Wind Load (w/mast adapter)	7.5 square feet
Turning Power (in lbs.)	800
Brake Power (in lbs.)	5000
Brake Construction	Electric Wedge
Ball Bearing Assembly	Dual race/96 bearings
Mounting Hardware	Clamp plate/steel U-bolts
Control Cable Conductors	8 (Belden 8448 or 9405)
Shipping Weight (lbs.)	24
Effective Moment (in tower)	2800 foot/lbs.



The HDR-300A

is the best for king-sized antenna arrays up to 25 sq. ft. wind load. Machined steel output gear. Tough, hardened stainless steel output shaft with a long keyway for added reliability. North or South centered calibration. Ferrite beads are installed on the potentiometer wires to reduce RF susceptibility. Heavy-duty self-centering steel mast clamp and hardware. Digital heading display accurate to 1°. Mast size: 1.25"-3" .. **\$1229.99**

beads are installed on the potentiometer wires to reduce RF susceptibility. Heavy-duty self-centering steel mast clamp and hardware. Digital heading display accurate to 1°. Mast size: 1.25"-3" .. **\$1229.99**

HDR-300A Specifications

Wind Load capacity	25 square feet
Wind Load (w/mast adapter)	N/A
Turning Power (inch lbs.)	5000
Brake Power (inch lbs.)	7500
Brake Construction	Solenoid operated locking
Bearing Assembly	Bronze sleeve w/rollers
Mounting Hardware	Stainless steel bolts
Control Cable Conductors	7 (Belden 8448 or 9405)
Shipping Weight (lbs.)	55
Effective Moment (in tower)	5000 ft/lbs.



The AR-40

is for large FM-TV and compact communication antenna arrays up to 3.0 sq. ft. wind load area. The dual 12 ball bearing race is exclusive in its class. Automatic position sensor never needs resetting. Fully automatic control, just dial and touch for any desired location. Solid state, low voltage control. Safe and silent operation. Maximum mast size: 2.063 in. Includes light duty lower mast support.... **\$269.99**

AR-40 Specifications

Wind Load cap.(inside tower)	3.0 square feet
Wind Load (w/mast adapter)	1.5 square feet
Turning Power (inch lbs.)	350
Brake Power (inch lbs.)	450
Brake Construction	Disc Brake
Ball Bearing Assembly	Dual race/12 bearings
Mounting Hardware	Plated clamps/steel bolts
Control Cable Conductors	5 (Belden 8448 or 9405)
Shipping Weight (lbs.)	14
Effective Moment (in tower)	300 ft/lbs.

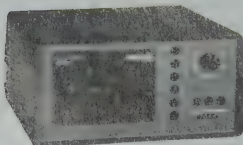


The CD-45-II

handles 8.5 sq. ft. mounted inside a tower, or 5 sq. ft. with mast adapter. Low temperature grease good to -30°F. Bell rotor design gives total weather protection, dual 58 ball bearing race gives proven support. Die-cast ring gear, stamped steel gear drive, heavy duty, trouble free gear train, North or South center scale, lighted directional indicator, 8-pin plug on control unit, snap-action control switches, low voltage control, safe operation, takes masts up to 2.063". Includes light duty lower mast support.... **\$369.99**

CD-45-II Specifications

Wind Load cap.(inside tower)	8.5 square feet
Wind Load (w/mast adapter)	5.0 square feet
Turning Power (inch lbs.)	600
Brake Power (inch lbs.)	800
Brake Construction	Disc Brake
Ball Bearing Assembly	Dual race/48 bearings
Mounting Hardware	plated clamps/steel U-bolts
Control Cable Conductors	8 (Belden 8448 or 9405)
Shipping Weight (lbs.)	22
Effective Moment (in tower)	1200 ft/lbs.



The DCU-1 PATHFINDER

Digital Rotator Control unit compatible with CD-45-II, HAM-IV, T-2X

Automatic operation of brake and rotor with digital readout out of your beam heading, accurate to 1°, and 360° choice for center of rotation. Automatic 8-second brake engagement delay reduces stopping torque stress. Six presets store favorite headings. RS-232 computer control, compatible with many logging and contest programs .. **\$599.99**

Rotator Accessories

MSHD Heavy duty lower mast support for HAM-IV/V, T-2X/XD	\$99.99
MSLD Lower mast support for CD-45-II, AR-40	\$39.99
TSP-1 Tower spacer plate	\$34.99



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ROTATORS

Precision designed for a wide variety of antenna installations • Strong, weatherproof, die-cast aluminum enclosures • Permanently lubricated for years of smooth, quiet operation • 450° Rotation • Selectable north or south center • Quiet, gear reduction braking • 117/220 VAC • Fits most USA-made tower shelves.

G-2800DXA (left) The top-of-the-line rotator for extra heavy-duty applications. 450° total rotation, with presets • 34 sq. ft. wind load • K-factor of 6870 ft. lbs. • 1808 ft. lbs. of stationary torque • Rotation torque: 57.8-181 ft. lbs., rotation speed and torque vary with the speed control setting • Maximum vertical load of 661 lbs. • $\pm 1/2^\circ$ backlash • 1.875-2.5" mast size • 48-150 second 360° rotation • Optional GS-232A interface • Includes 131' (40m) of 6-wire cable • 8" dia. x 13.375" h • 13.2 lbs. **\$1139.99**

G-1000DXA (right) High-performance for medium and heavy-duty applications. Total rotational range 450°, with presets • 23 sq. ft. wind load • K-factor of 2020 ft. lbs. • 433 ft. lbs. of stationary torque • Rotation torque: 43-79 ft. lbs., rotation speed and torque vary with speed setting • Max. vertical load: 440 lbs. • $\pm 2^\circ$ backlash • 1.5-2.5" mast • 35-74 sec. 360° rotation • Optional GS-232A interface • Requires 6-wire cable • 7.5" dia. x 12.5" h • 7.7 lbs. **\$519.99**

G-450A (left) For HF/VHF light to medium-duty applications, without presets • 10 sq. ft. wind load • K-factor of 722 ft. lbs. • 217 ft. lbs. of stationary torque • Rotation torque: 43 ft. lbs. • Maximum vertical load of 220 lbs. • 1.5-2.5" mast size • 53 second 360° rotation • Requires 5-wire cable • 7.5" dia. x 12.5" h • 7 lbs. **\$259.99**

G-5500 (right) Azimuth-Elevation rotator combo for satellite earth station & other space communication antennas • 11 sq. ft. wind load • 578 ft. lbs. K-factor • 145 ft. lbs. stationary torque • Rotation torque: 44 ft. lbs. • 440 lbs. max. vertical load • $\pm 4\%$ backlash • 1.5-2.5" mast • 58 sec. 360° rotation • 67 sec. 180° elevation • Opt. GS-232A interface/C-1000 cable • 1.25-1.625" boom dia. • Requires 2 x 6-wire cable • 12.5" dia. x 7.5" h, 20 lbs. **\$629.99**

G-550 Elevation rotator, for satellite earth station and other space communication antennas • 12 sq. ft. wind load • K-factor of 578 ft. lbs. • 101 ft. lbs. of stationary torque • Rotation torque: 73 ft. lbs. • Maximum vertical load of 440 lbs. • $\pm 3\%$ backlash • 1.5-2.5" mast size • 67 second 180° elevation • 1.25-1.625" boom diameter • Requires 6-wire cable • 10.5" dia. x 7.5" h • 7.3 lbs. **\$299.99**

G-800DXA (left) High-performance for medium-duty applications. Total rotational range 450°, with presets • 17 sq. ft. wind load • K-factor of 1299 ft. lbs. • 288 ft. lbs. of stationary torque • 43-79 ft. lbs. rotation torque, rotation speed/torque vary with the speed control setting • Max. vertical load of 440 lbs. • $\pm 2^\circ$ backlash • 1.5-2.5" mast • 35-74sec. 360° rotation • Optional GS-232A interface • Requires 5-wire cable • 7.5" dia. x 12.5" h • 7.5 lbs. **\$429.99**

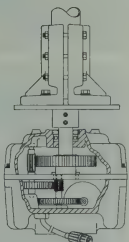
G-800SA (right) High performance for medium-duty applications. Total rotational range 450°, no presets • 17 sq. ft. wind load • K-factor of 1299 ft. lbs. • 288 ft. lbs. of stationary torque • 43-79 ft. lbs. rotation torque, rotation speed/torque vary with the speed control setting • Max. vertical load of 440 lbs. • $\pm 2^\circ$ backlash • 1.5-2.5" mast size • 44 second 360° rotation • Quick-disconnect plug • Requires 5-wire cable • 7.5" dia. x 12.5" h • 7.5 lbs. **\$339.99**

ACCESSORIES

GC-038 Mast clamp **31.99**
GC-048 Mast clamp for G-2800 **47.99**
GS-050 50mm thrust bearing (1.25"-2") **31.99**
GS-065 65mm thrust bearing (1.5"-2.5") **47.99**
GS-232A Interface for DXA rotators **539.99**
C-1000 GS-232A cable for SDX's/S500 **29.99**
GS-680U Universal, self adjust. bearing. **99.99**
SEP KIT Separation kit for G-5500 **23.99**



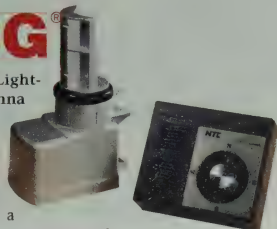
OR-2800PDC Heavy-duty Rotator Powerful and reliable, rotates multiple HF antennas or large VHF or UHF arrays with ease. The control box provides manual features plus heading preset, 10 programmable presets, programmable ramped start/stop, 1/2-degree target accuracy. Includes RS-232 port for computer control • Precision worm-gear drive, not reversible by mast torque • Non-slip, ductile iron mast clamps • Large drive plate for masts up to 3" • Heat-treated steel gear train, hardened driveshaft • Prop-pitch style torque plate • Fits inside most popular towers and mates to standard towers and rotator plates • Motor-mounted digital pulse switch for accurate, closed loop control and heading display • 35 sq. ft. wind area • 1800 lbs. vertical load • 1.75-3.125 O.D. mast size • 55-270 second rotation speed • 0.1°/0.5° travel resolution • 110/220V AC, 50/60Hz input • 28-42V DC motor • Requires 8-wire (2 4-wire runs) rotor cable • 15.75" h total, 9.75" h rotor • 42 lbs. **\$1399.99**



9521A Drive Unit: Handles small to medium-sized VHF/UHF Ham antennas and TV antennas • One-piece cast aluminum housing • Heavy-duty rotator motor, three wire control • Precision-cut gear system • Built-in steel thrust bearing • Wind-tested brake pad • Durable powder-coated finish
 Control Unit: Direct access via channel number or compass heading • Compatible with most remote controls • Separate infrared remote controller • 69 channel programmable memory • Auto-synchronization for pinpoint accuracy • 3-wire **\$99.99**



U-105 Light-duty Antenna Rotator Long life, precision cut, hardened steel gears in a rugged, one-piece, cast aluminum housing. Large bearing surfaces and a strong, reinforced mast for lateral load support. Ball bearings are provided for vertical thrust load. This rotator's high torque easily handles the largest TV/FM and modest amateur VHF/UHF antenna arrays. Built to take high winds and harsh weather extremes with a water tight, lubricated seal. With completely automatic control, it accurately shows orientation of antenna and offers smooth, quiet operation.
 Control Unit: 120 VAC, 60 Hz, 68W • 18 VAC output voltage • 3-wire • 7" w x 5.875" d x 2.375" h
 Rotator Drive Unit: 360° rotation (mechanical stop) • 70 sec. rotation • Rotation torque of 8 ft.-lbs. • 100 lb. max. vertical load • 1.125" to 2" O.D. support mast • 10 lbs. **\$69.99**
TB-105 Support Bearing Use with the U-105 rotator to provide extra support and adding strength to an antenna installation. Ball bearing design also relieves stress from varying wind loads on the rotator drive and bearing. **\$18.99**



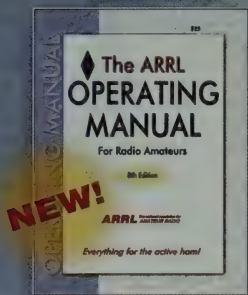
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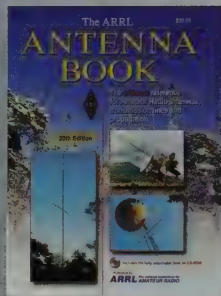


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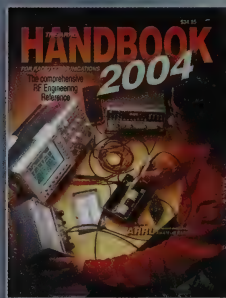
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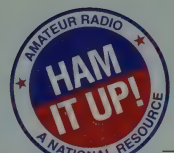
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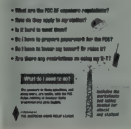
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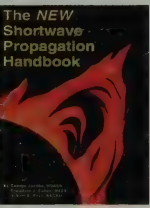
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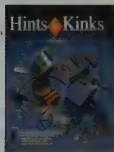
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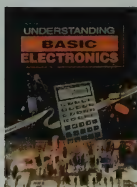
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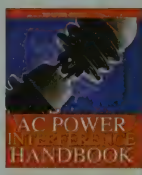


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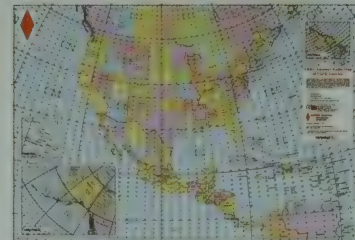
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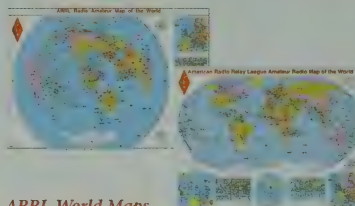
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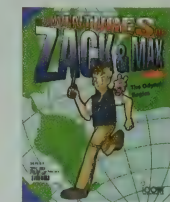
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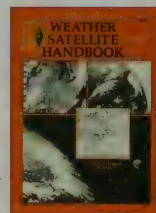
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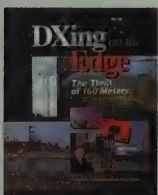
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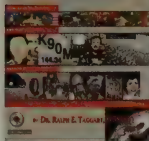
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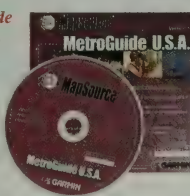
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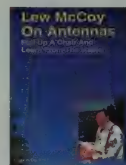


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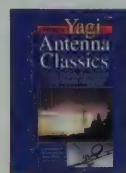
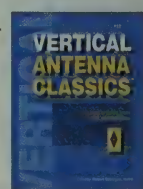


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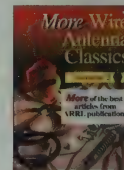
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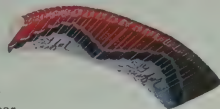
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3305 Zig Zag Racer Remote Control Electric Boat Super fast, highly maneuverable, the ultimate in pool-sized fun. Comes completely assembled and ready for action. Just pop 8 AA's in the transmitter, apply colorful stickers to the body, and you're ready to go. Includes a 2-stick, 2-channel, 27 MHz transmitter; fully proportional electronic speed control; reliable electric motor; 8 AA's and 900mA rechargeable battery; wall charger; 3 anchoring buoys and bolt-on bumper for retrieving buoys and playing water soccer. 15"l x 5.75"w, 16 oz **\$79.99**

RC PLANE/BOAT ACCESSORIES

4020 Sonic Combat Module Option for Firebird Commander and Aerobird Challenger. Clips on bottom of craft and connects to receiver circuitry. When pulling back on throttle, it fires a focused, high-frequency sound blast (effective to 50'), temporarily disabling a motor for 10 seconds while allowing full steering. Also serves as detector for "hits" from other aircraft **\$23.99**

6023 Air Drop Module Option for Firebird, Firebird Commander and Aerobird Challenger. Allows for dropping of streamer bomb or parachute. Includes 2 streamer bombs and one parachute **\$19.99**



4025F StealthTarget The perfect accessory to go with any SCM-equipped HobbyZone airplane. Hone your combat techniques without an opponent. Does not fly but mounts stationary on a 24" support pushed into the ground in an open area. Emits a tone when it detects a sonic "hit". 13"l x 8"w, 4.8 oz. Includes 9V battery **\$19.99**

1011 Speed Battery for Firebird II **\$17.99**

1012 Replacement 7.2v 900mAh NiMH battery for Firebird, Zig Zag Racer and Aerobird **\$24.99**

1013 High performance, 8.4V 900mAh NiMH battery for Aerobird and Firebird **\$29.99**

7809 High-performance 7.2V 1100mah battery pack for Sky Surfer. Doubles flight time to approximately 8 minutes **\$29.99**

1026 DC Peak Charger For all batteries. Features peak detection circuitry and adjustable current so charge rate can be customized. A red LED indicator shows charge cycle status. Unit plugs into any automobile outlet – perfect for use in the field. It will also work as a replacement for 1022 **\$19.99**

2015 7.2V 3-hour wall charger **\$8.99**

Secure
www.aesham.com

TRAXXAS



RADIO-CONTROLLED ELECTRIC MODELS

2410 "Bandit" Electric Sports Buggy Ready-to-run with ProGraphix body, TQ radio system and pistol-grip rotary mechanical controller. No delicate parts or tricky adjustments to worry about. Go ahead, put yourself behind the wheel and experience the speed and thrill of an Extreme Sports Buggy. • Powerful, Stinger, 20-turn, modified motor • Tough 272-Magnum™ variable ratio transmission with slipper clutch, planetary-gear differential and ball bearings throughout • Adjustable, easy-to-change gear ratios • Fiber-composite chassis • High-volume, oil-filled UltraShocks™ • Fully independent, long travel, suspension • Telescoping, U-joint driveshafts • Fiber-composite suspension arms • Bell crank steering virtually eliminates bump steer • Requires 8 AA alkalines, 7.2V NiCad rechargeable battery pack and charger (not included) • 16.25" x 7" h, 48 oz **\$129.99**



3606 "Stampede" Electric Monster Truck The chassis is pure monster, with its reinforced channel design, fiber-composite materials, and unsurpassed ground clearance. The suspension is pure race, with track-tuned geometry and the fully-adjustable oil-filled shocks of a competition-level race truck. Fully assembled, ready-to-run. Includes TQ™ radio system and forward/reverse XL-1 electronic speed control. • High-torque, Stinger, 20-turn, motor • Tough, 272 Magnum™ variable ratio transmission with slipper clutch, planetary-gear differential and ball bearings throughout • Adjustable, easy-to-change gear ratios • Fiber-composite chassis and suspension arms • High-volume, oil-filled UltraShocks™ • Fully independent, long travel suspension • Telescoping, U-joint driveshafts • ProGraphix™ body, chrome wheels • 23+ mph top speed • Requires 8 AA alkalines, a 7.2V NiCad battery pack and charger (not included) • 16.25" L x 9.5" h, 68.2 oz **\$174.99**

ROBINSON RACING PRODUCTS

1422 Absolute pinion 22T, 48p hardened gear for RC-2141. Needed for Losi XXX-4 kit..... **\$4.99**



3710 "Rustler" Electric 1/10-Scale 2WD Stadium Race Truck Delivers pro-level racing technology and performance in a reliable, easy to maintain package. Designed for performance and durability, expect hours of low-cost, fast, radio-controlled fun. Fully assembled, ready-to-run, with TQ™ radio system with rotary mechanical speed control, ProGraphix™ painted body and chrom wheels. • High-torque, Stinger™, 20-turn, modified motor • Tough 272 Magnum™ transmission with slipper clutch, planetary-gear differential, ball bearings • Adjustable, easy-to-change gear ratios • Fiber-composite chassis and suspension arms • Low-maintenance, planetary-gear differential • High-volume, oil-filled UltraShocks™ • Fully independent, long travel suspension • Telescoping, U-joint driveshafts • Bell crank steering virtually eliminates bump steer • Requires 8 AA alkalines, a 7.2V NiCad rechargeable battery pack and charger (not included) • 17.5" x 7" h, 54.8 oz **\$134.99**

3706 "Rustler" Same as 3710 above, but includes the powerful XL-1 electronic speed control with full, digital proportional forward/reverse throttle control **\$154.99**



3906 "E-Maxx" Dual-Motor, 4WD Electric Monster Truck For gut-wrenching, wheelie-popping monster torque, nothing comes close. Twin Titan™ 550, fan-cooled motors, trick ESC power system, and shift-on-the-fly 2-speed transmission. Ready-to-run with a 3-channel TQ-3 radio system and a painted ProGraphix™ body. Features a new, extra tough, molded composite semi-tub chassis with battery cutouts that lower the C.G. Accepts both stick packs and side-by-side race packs. • Adjustable slipper clutch system • 4-wheel, independent suspension with 4" of ground clearance and over 3.5" of plush, oil-dampened suspension travel with 8 oil-filled shocks • Microprocessor based 16.8V EVX electronic speed control affords precise control over forward and reverse speed • 30+ mph top speed • Requires 8 AA alkaline and (2) 7.2V NiCad batteries with charger (not included) • 19.125" x 10.5" h, 155.2 oz **\$334.99**

More information on Traxxas products available at www.traxxas.com



RADIO-CONTROLLED ELECTRIC MODELS

A0090 "XXX-T" 2WD, Sport, 1/10 Scale, Ready-to-Run Electric Truck Features ball bearings throughout, a powerful open endbell 19-turn motor (with replaceable brushes), and is topped off with an attractive painted body with hot graphics. Industry leading JR computer-based multi model radio system with new hi-torque servos and a GM electronic speed control that offer quality and features not found on any similar model. • V3R electronic speed control with reverse • Exclusive XXX-T suspension package with hard-anodized oil filled shocks • Rigid molded chassis with dropped center • Molded suspension components feature interlocking construction • Universal driveshafts delivering crisp acceleration and improved traction • Adjustable slipper clutch • Racing transmission with HD adjustable ball differential • Racing tires preglued on one-piece wheels **\$269.99**



A0014 "XXX-4" 4WD, Competition, 1/10-Scale Electric Buggy Kit A no-compromise 4-WD racer. Designed to give the remarkable performance of a 4WD, while being as easy to maintain as a 2WD. Phenomenal performance from a sealed, single-belt drive that reduces friction for outstanding acceleration. • Interlocking construction for ease of building and adjustment (all but eliminates chassis tweak due to impacts) • Ingenious slipper clutch absorbs drive train shock while maintaining crisp acceleration and improved handling • Sealed ball bearings throughout for reduced friction, higher speeds and longer run times • Attractive aerodynamic body/wing • Hard-coated shock absorbers • Easy access differentials • Requires motor, pinion gear, radio speed control and battery **\$269.99**



TRINITY

RC-2141 Monster Horsepower Pro Stock Motor This version of the Monster Horsepower stock motor has been tweaked for the ultimate in performance. The commutator is trued, magnets zapped, new brushes and springs and dyno tested. • RPM: 21,227 @ 5V • Power: 64W @ 10.1k • Efficiency: 49.0% @ 14.6k • 99.7 Nmm torque • Meets all ROAR and NORRCA specs **\$39.99**

TESTORS



Metal Body R/C Model Kits It's fun to build models. It's even more fun to race the model you have built. There's no need to solder wires, paint the body, or glue pieces together. Just assemble the pre-painted models with a screwdriver, add 2 AA batteries for the cars and one 9V battery for the pistol grip transmitter/controllers and you're ready to go. The 1/32 size makes racing in the living room easy and their die-cast bodies are tough.

800001 1/32 Mini Cooper (left) 4.375"l x 2" w x 1.75" h, 8 oz. **\$29.99**

800002 1/32 Audi TT Coupe (right) 4.875"l x 2" w x 1.5" h, 6.4 oz. **\$29.99**



ELECTRIC CAR ACCESSORIES

4010 Mega1™ AC/DC Quick Charger Charges 4 to 7-cell NiCad batteries • 1200-1400mAh batteries charge in 15 minutes • 15-minute timer • Automatic trickle charge • Voltmeter outlets for monitoring voltage • Operates from 110V AC or 12V DC • Includes 5.5' AC power cord, 2.5' DC cord with alligator clips and 8" charging connection with 2-pin plug • 6.5" w x 4.25" h x 2.25" d, 2.6 lbs **\$29.99**



4046 Vision Peak Plus™ Charger Charges 6/7-cell NiCad and NiMH car and receiver packs • Selectable 1 or 4A rate and automatic trickle charge • AC/DC peak detection automatically stops fast charging • 30-second "boost charge" feature gives one-minute boost after battery has been on trickle charge for extended period • Audible "beep" when power is turned on, battery peaks, or error occurs • LCD indicates peak charge time, current, voltage and peak voltage • Operates from 110V AC or 12V DC • Includes 5.5' AC power cord, 3.5' DC cord with large alligator clips and a 12" 2-pin charging connection with 3 connection choices • 7" w x 4.75" h x 2.75" d, 3.6 lbs. **\$69.99**

1000 Dyna-Sport™ 1500mAh high-performance, 6-cell, flat NiCad battery pack for electric cars • Welded tab construction • High-quality superflex silicone wire • Panasonic cells • Needed for Losi XXX-4 kit. **\$16.99**

1145 Dyna-Fun 2000 2000mAh high-performance, 6-cell, flat NiCad battery pack for electric cars **\$39.99**

QUEST FLYING MODEL ROCKET KITS

These kits require some assembly. White glue, plastic cement, finishing supplies, launch system and rocket motors are not included. They use solid-fuel rocket motors that are safe, non-reusable devices. A new motor is needed for each flight.



1004 Astra 1 Recommended for beginner modelers • Flies up to 1000 feet • 14" diameter parachute recovery system • Motors: A6-4 (first flight), B6-4, C6-5 • 13" long • Diameter: .984" • 0.81 oz. **\$7.49**



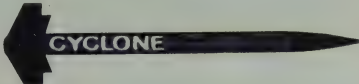
1014 Big Betty Recommended for beginner modelers • Flies up to 800 feet • 14" diameter parachute recovery system • Motors: B6-4 (first flight), C6-3, C6-5 • 23" long • Diameter: 1.576" • 3.5 oz. **\$9.99**



1604 QE-Z Payloader Recommended for beginner modelers. A quick kit - ready to launch in 15 to 45 minutes. Features a forward body tube area that can be utilized as a payload section. Display stand included. • Flies up to 1200' • Dual 14" parachute recovery system • Motors: B6-4 (first flight), C6-3, C6-5 • 21.5" long • Diameter: 1.18" • 2.3 oz. **\$11.99**



2001 "Evader" Cruise Missile Recommended for the experienced modeler. Modeled after tomorrow's leading-edge cruise missile designs. Features plastic nose cone, die-cut balsa fins and impressive decals for a dramatic appearance. • Flies up to 1200 feet • Parachute recovery system • Motors: A6-4 (first flight), B6-4, C6-5 • 16.38" long • Diameter: 0.984" • 1.0 oz. **\$7.99**

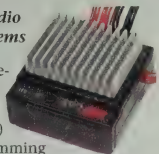


PRE-ASSEMBLED MODEL ROCKET KIT

5721 Cyclone Pre-assembled, ready-to-fly, launch in minutes! • Flies up to 1000 feet • Parachute recovery system • Motors: A6-4, B6-4, C6-5 • 16" long • Diameter: .984" • 3.5 oz. **\$9.99**

JR Precision Radio Control Systems

SP-100 C-1 Forward/Reverse Electronic Speed Control Has all the features: 15-turn motor (or greater) limit, EZ one-touch programming for quick setup and adjustment, high frequency operation for smooth and efficient operation and thermal overload protection. • 7.2-8.4V • 160A/640 A output • 1.45" x 1.71" x 0.89", 1.92 oz. **\$64.99**



ROCKET MOTORS & ACCESSORIES

Single-Stage Motor Flightpack (three per pack) Quick and easy to use. Quality and safety built-in, every launch is an instant success. Motor model description (i.e. A6-4):

A - Total power or impulse produced by motor. Each succeeding letter has double the previous; for example, a "B" type has twice the power of an "A" type motor.

6 - Average thrust or how fast the motor enables your rocket to travel. The higher the number, the greater the speed.

4 - Time delay in seconds from the end of thrust to the parachute ejection charge

5740 A6-4 0.56 lb.-sec. impulse • 4 second time delay • 2.5 oz. maximum lift weight • 0.12 oz. propellant weight..... **\$6.29**

5741 B6-4 1.2 lb.-sec. impulse • 4 second time delay • 4 oz. maximum lift weight • 0.23 oz. propellant weight..... **\$6.79**

5743 C6-3 2.25 lb.-sec. impulse • 3 second time delay • 2.5 oz. maximum lift weight • 0.44 oz. propellant weight..... **\$7.49**

5744 C6-5 2.25 lb.-sec. impulse • 5 second time delay • 4 oz. maximum lift weight • 0.44 oz. propellant weight..... **\$7.49**

7021 Model Rocket Recovery Wadding Enough for over 30 flights. Flame retardant and biodegradable..... (100 sheet value pack) **\$2.99**

7010 Tigertail II Igniters Shown attached to rocket motor, above..... (pack of 6) **\$2.99**



7700 Complete Launch System Includes launch controller and lift-off launch pad. Controller features blinking arming light and alarm, deluxe safety key, and "Sure Grip" design. Requires one 9-Volt alkaline battery (not included). Pad features 36" two-piece launch rod, blast deflector, tilt adjustment, rod safety cap and wind streamer.... **\$18.99**

317275 XS3 75MHz Computer Racing System Uses synthesized signal processing - allows racers to use whatever frequency the track requires. Features include multipoint throttle curves, dual-rate steering, 6-model memory, exponential and other tuning options. Separate button for reversible transmission models. Also includes one Z590M metal gear torque race servo, one Z270 standard race servo, RS300 synthesized 3-channel FM receiver, battery holder and hardware..... **\$239.99**



Age 8 and up. Fun and educational! By assembling the kits, children and young adults learn some fundamentals of robotics and electronics. Assembly requires cutting and long-nose pliers, small hammer and screwdriver, and one 9V and 2 AA batteries.

MR-1001 SoundTracker A lively robot with audio sound sensor that causes it to react and alter direction of movement. 5"l x 3.75"h x 5.5"w **\$29.99**

MR-1002 Antoid Has six legs that make him quite maneuverable. Uses infrared light source and sensor to alter direction. 6"l x 6"h x 7"w..... **\$49.99**



908 Talking Electronic Chess Computer Go up against this chess pro for a challenging game!
 • Magnetic board and chess pieces • pieces store conveniently in compartment under board • Expert strength - estimated 2000 rating • Speaks to player in english, french and german • Includes special teaching and coaching features • 136 selectable levels from beginner to expert • Easy-to-read LCD shows how much time each player has on dual clocks, every move for both player and computer, move counter, automatic scoring, and info mode (what computer is "thinking") • Auto shut-off with memory save, selectable opening lines for play and learning, and lots more • Operates on 3 AA batteries • 12"w x 1"h x 9.98"d, 1.75 lbs. **\$49.99**

H-422 Forever Flashlight The last flashlight you'll ever need to buy! It never needs batteries or bulbs! Just a 30-second shake activates the electromagnet charging mechanism giving you up to five minutes of continuous bright light. Clear case shows mechanism. • Super bright LED • Waterproof • floats in water • Visible for up to one mile • Great for cars, boats, campers and emergency kits • 10.5" long x 1.5" dia, 12 oz.... **\$24.99**

H-423 Micro Forever Flashlight Same features and operations as the H-422, but smaller. • 7.375" long x 1" diameter, 5.6 oz..... **\$19.99**

BOUNTY HUNTER[®] METAL DETECTORS



METAL DETECTORS

LAND STAR boasts more features than other costly detectors.

Includes a Bounty D-Tech™ open-face search coil, advanced microprocessor electronics, 3-tone discrimination and Ground Trac™ retune. A multi-function LCD and touchpad control make it equally at home relic hunting, coin shooting, or gold prospecting. Set the notch to reject items, or let "Auto Notch" detect coins 12" deep..... **\$349.99**



FAST TRACKER

Newcomers to treasure hunting should not be shortchanged when it comes to features - or quality. That's why there's the Fast Tracker™. It offers 7" Bounty D-Tech™ search coil (adjustable angle), dual-tone audio discrimination, motion all-metals mode, auto ground balance, low-battery alert, built-in speaker, headphone jack, and lightweight S-rod comfort-grip handle with stand **\$99.99**



SHARP SHOOT II

Treasures missed by generations won't escape the Sharp Shooter II™. Digital LCD, touchpad control, and interchangeable Bounty D-Tech™ search coil. Also features 3-tone audio discrimination, selectable auto/manual notch level, auto ground balance, battery indicator, S-rod comfort-grip handle with stand, headphone jack, and built-in speaker **\$299.99**



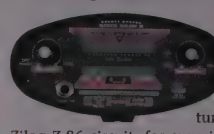
TRACKER IV

The optimum combination of power, ease-of-use, affordability, and big finds - every time: the Tracker IV™. Built with a fully-submersible 8" Bounty D-Tech™ search coil, sensitivity meter, built-in speaker, headphone jack and battery indicator. Tracker IV features 3 different user-adjustable operating modes: Motion All-Metals Mode, Full Discrimination, and Tone Discrimination **\$129.99**



LAND RANGER

Offers high-end features for the serious detectorist. Designed for every metal detecting application at a pro level. Touchpads keep all modes at quick and easy access while the LCD emits a constant reference source maximizing every possibility for finding treasure. It features an 8" waterproof, interchangeable search coil and SmartTrac™ ground control..... **\$449.99**



QUICK DRAW II

The Bounty Hunter Quick Draw II™ metal detector packs powerful features, like an advanced Zilog Z-86 circuit, for superior discrimination and control. Also includes waterproof Bounty D-Tech™ search coil, 3 levels of iron discrimination, both target ID and depth readout, sensitivity control, full discrimination, auto and variable notch, and low battery indicator. Detects up to 10" deep - larger objects up to 5' **\$299.99**



TIME RANGER

Recover more relics and valuables from the past than ever before. The Time Ranger's powerful circuitry and smooth operation combine to deliver absolute performance. The innovative Sniff-Mode can be used in specialized applications when rejection/acceptance of a particular object is desired **\$549.99**



BOUNTY HUNTER ACCESSORIES

CARRY BAG Padded Carrying Case Protects metal detectors from the elements, in storage and transit. Rugged, double-stitched, nylon construction. Includes outside zip-pocket **\$29.99**

10" COIL 10-inch Magnum Coil Adds extra depth for relic and cache hunting **\$49.99**



Modern flashlights using LED technology. Lights an area like no other flashlight! 25-day batteries (with diminishing brightness) • 11-year (typical), solid-state LED's • Bright, diffused white light • Waterproof to 2' • Shock-proof, high impact composite case with lanyard and hook • 3 year warranty, including LEDs

LW-2000 (left) 3 AA alkaline batteries (included) power 4 LEDs. 7.75" long, 1.25" diameter **\$29.99**

LW-4000 (right and end view above) 3 D alkalines power 10 LEDs. 10.75" long, 2" diameter... **\$59.99**



LW-3000 Similar to LW4000, but smaller. 3 C alkalines power 7 LEDs. 8.75" long, 1.625" dia.... **\$49.99**

LW-HT Illuminator™ Head Torch 1"-wide adjustable strapping secures light to the head. Up/down adjustable. 4 high-intensity LEDs powered by 3 AA batteries (not included) provide super-bright light visible for over one mile, over 330 hours **\$39.99**



LW-PB PocketBright™ Flashlight Includes key ring, neck lanyard and velcro patches. Single, high-intensity LED, powered by 2 included Lithium batteries, provides over 50 hours of light that can be seen across a full-sized room **\$19.99**



COMMUNICATIONS OUTFITTERS

EXP-1 Expedition Pack Designed for the Yaesu FT-817. Allows backpack style or table top operation with complete access to all controls, front and rear. Zippered pouch on both sides securely holds most any antenna in the collapsed position for travel. Radio compartment is divided so the top section will hold the FT-817, and the lower compartment can be used for an amplifier, tuner or other radios. Made of high quality, durable nylon with plastic panels for rigidity. Water-resistant. 12" w x 4" h x 15" d..... **\$99.99**



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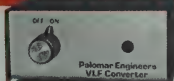
RT3-4653 Locking GearKeeper™ Two-Way Radio Tether Prevents loss or damage from device being dropped. Easy connect and disconnect. Retractable 32" tether with 24-ounce return force. Full 360° rotating belt clip..... **\$29.99**



RT2-4012 Mic Keeper™ Tired of fumbling with your microphone? Why not grab it, use it, let it go? Retractable 20" tether with 12-ounce return force and snap clip, attaches to D-ring or belt loop. The ultimate way to keep track of your mic..... **\$19.99**

Palomar Engineers

VLF CONVERTERS



Receives and converts 10kHz-500kHz (VLF) to tune the 4MHz range. 2 models tune this low range on either a general coverage receiver or Ham band transceiver. Uses 9V battery. 2" h x 4.25" w x 5" d.

VLF-A Use with Ham band transceiver.... **\$99.99**

VLF-S Use with general coverage receiver. **\$99.99**

MFJ MFJ ENTERPRISES, INC.



CARRYING CASES

18 HamGear™ Tactical Chest Harness (left) Perfect for rugged use, emergency radio operators and on-the-go hams! Use it for portable hamfest use, DXpeditions, field day, biking, hiking, etc. Made of durable heavy duty twill burlap, this interwoven fabric is water resistant and will cushion blows and scrapes. Adjustable shoulder straps. Harness is firmly held in place by stretchable inter-woven elastic belt with snap hook and adjustable sliders supported by nylon straps. A 5 x 7 inch cargo pocket holds another radio, maps, etc..... **\$29.99**

15 HamGear™ Belt Radio Holder (right) Durable twill burlap pocket with elastic cord and velcro closure easily stretches over any HT. Belt slides easily through 2 x 3 inch loop..... **\$14.99**

VECTRONICS

Electronic Kits Each features a quality epoxy glass PC board with solder mask and screen-printed component key, manual and components. Choose from 40M receiver; crystal radio; 40M CW, AM radio and TV transmitters; 2M preamp; CW keyer; battery conditioner; FM broadcast SCA decoder; SSB audio filter; and tunable SSB/CW audio filter..... **See Price Guide**

SUPERIOR ACCESSORIES

HOU CPM-310 6" pedestal for convenient mounting of small mobile radios. Bolts securely to vehicle floor board or any convenient area. Adjustable to multiple viewing angles..... **\$14.99**



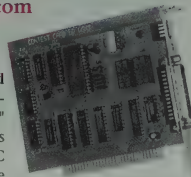
UM Unified Microsystems

ums@nconnect.com

CONTEST CARD

W9XT Contest Card for IBM™ and PC Compatible A non-volatile 5" x 4.5" card that plugs into a single 8-bit PC slot and provides voice recording, playback and CW keying. Stores a total 60 seconds of voice audio divided into four 15 second messages. Samples at 8 kHz for high quality and natural sound. Does not use any disk space. For CW, the card frees up the PC port, and a relay allows operation with positive or negative keying. Works with all rigs and is compatible with most popular logging programs..... **\$139.99**

CCC-8 Contest Card Cable Semi-kit Wired and tested except for connectors to mic and transmitter. Includes 6 ft. shielded cable, CW keying line and record switch (8-pin)..... **\$44.99**



AOR

TDF-370

Multi-Media Terminal with DSP Listen to amazingly clear audio, transmit and receive PSK31 and RTTY, apply potent filtering and hear "weak ones" others may miss. Digital modes without a PC! • Use powerful



DSP noise reduction and filtering, including Fast Fourier Transform. Auto-notch function • Enhance audio reception of SSB and CW • Monitor SSB and CW in derived "stereo" • Decode and display PSK31 or RTTY, on the LCD • Enhance transmitted audio with 8 channels of mic equalization • Digital voice recorder • 2 selectable front panel inputs • Six outputs: phone, stereo headphones (included) internal or external speaker, mic, PTT and COM • Requires 4 AAAs, NiCads or NiMHs or regulated external 9-15 VDC • 3.3" h x 4.3" w x 6.2" d, 12.3 oz..... **\$299.99**



ARD-9800

Digital Voice & Image Interface Use conventional analog voice transceiver for digital voice communications,

data and images while maintaining analog capabilities. No modifications, simply connect between mic and jack. Operates with transceiver in SSB mode. Automatic voice signal detector recognizes received signal as analog or digital, automatically switching to appropriate mode. Uses Open Digital Protocol, use is permitted on US amateur bands. Send and receive SSTV images in digital mode. Built-in video output connector allows external TV monitor viewing. Operate high speed data on HF band at 3600bps. Operates on 10-16VDC @ 200mA. 3.94" w x 1.26" h x 6.14" d..... **\$549.99**

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Email Your Questions to info@aesham.com

AES

MISCELLANEOUS ACCESSORIES

149



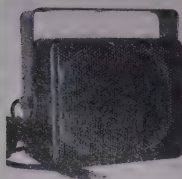
HEAR IT Noise Eliminating Speaker Incorporates new DSP technology. Fully adaptive to any change in background or man-made noise levels and effectively attenuates it up to -20dB. This dramatic drop in noise level results in clearer and less fatiguing audio that jumps out of the speaker.

The 'Hear it' has the capability to reduce noise equal to, or better than, DSP systems built into several popular radios. If the radio already has DSP, the 'Hear it' will provide an additional benefit. If it doesn't have DSP, the 'Hear it' will make a remarkable improvement in signal readability.

Offers 8 user-selectable noise cancelling levels, or cancelling can be switched off entirely. Plugging headphones or another speaker into the audio bypass jack mutes the speaker, but retains DSP noise reduction. • 2.5W of audio power • Requires 12-28VDC @ 500mA • 6.5' lead with 3.5mm mono plug • 4.5" w x 2.75" h x 2.25" d **\$159.99**



IN LINE MODULE Hear It In-Line Module Same audio enhancing features as the Hear It Speaker above. • 20dB average noise attenuation • 8 user-selectable noise attenuation levels • Input sensitivity control knob • 5W RMS audio input power • 2.5 W RMS, 8Ω audio output power • 3.5mm mono and RCA phono audio in/out jacks • Headphone jack • 12-24VDC, 500mA required • 3.5mm to 3.5mm audio and fused power leads supplied • 6.75" w x 3.325" h x 1.375" d, 1 lb. **\$199.99**



AES

PCL-1 Pro Communications Loud-Speaker Ideal for amateur radios, scanners, shortwave, PCs, paging, or surround sound. • Uses European-

built, 4" throw, 8Ω, 20W-rated contoured driver • Frequency response is 300Hz-5000Hz, ±3dB, optimized for max. speech intelligibility • Full magnetic shielding permits operation next to PCs, monitors or any other sensitive electronic equipment • Rugged, water resistant enclosure allows indoor or outdoor use • Powder-coated, perforated, metal grille protects speaker from damage or abuse • Complete with adjustable, metal mounting bracket for easy fixed or mobile use • Fitted with standard 3.5mm "mini-plug" on a 5.5', strain relieved cord • 5" w x 4.3" h x 3.2" d, 1.7 lbs **\$19.99**



MFJ ENTERPRISES, INC.

SPEAKERS

281 ClearTone™ Communications Speaker Features a 3" Mylar cone speaker mounted in a well-designed baffle. Improves speech intelligibility in the 600-4000Hz range while reducing undesirable noise, static & hum. 3.75" x 3" x 2.25" **\$12.99**

382 Deluxe ClearTone™ 1W Amplified Speaker Excellent for QRPers, base station HTs or rigs requiring more volume. A quality 3" speaker provides powerful audio - barely audible to high. All metal cabinet, rubber feet and vinyl clad cover. Uses 9V battery (not included) or 110V AC with optional adapter. Connecting cable included. 3.5" h x 1.75" w x 4.5" d **\$39.99**

OTHER ACCESSORIES

890 DX Beacon Monitor Use as an aid to check band conditions worldwide in just three minutes. It requires no connection to a transceiver. The beacon monitor is a stand alone timing device using a microprocessor and built-in WWVB atomic clock to keep track of the beacon activation sequence. LED indicators positioned across a world map show which of the 18 beacons is active at any given time. Storing the beacon frequencies in transceiver memory allows quick switching as one listens for beacon transmissions. When a beacon is heard on any of the frequencies, that band is open to the location indicated by the corresponding LED. • Requires 12VDC or 110VAC with the optional MFJ-1312D • 6.75" w x 5.25" h x 3" d **\$99.99**



616 Speech Intelligibility Enhancer™ Provides approximately 20dB audio frequency boost or cut to four overlapping octave ranges centered at 300, 600, 1200 and 2400Hz. Improves ability to hear and understand SSB, FM, AM, CW QSOs by adjusting response levels to match hearing response for best clarity, then equalizing perceived loudness to each ear. Built-in dual, 2.5W, audio amps; front panel jack; speaker on/off switch; 2 selectable transceiver in-puts; bypass switch. Use with rig or PA system. 10" w x 2.5" h x 6" d, requires 12 VDC **\$159.99**



624D Deluxe Hybrid Phone Patch Interfaces a phone line with a rig for running phone patches. Jumper selectable for all Kenwood, Icom, Yaesu and Alinco transceivers using an 8-pin microphone connector. Adapts to work with virtually any rig. Uses 12VDC, 9V battery or 110VAC with optional AC adapter. 8" x 2" h x 6" **\$119.99**



762 Step Attenuator Provides push-button selection of up to 81dB attenuation in 1dB steps • Excellent performance up to 170 MHz, usable to 500 MHz • 50Ω, 250 mW maximum input • BNC connectors with BNC-to-SO-239 adapters included • All metal cabinet, 6.5" w x 2.5" h x 1.5" d. **\$69.99**



OAK ON AIR or BLACK ON AIR Illuminated Station Sign When actuated, the nearly 2" letters shine via six, noise free, replaceable, incandescent lamps. When not actuated, the letters are nearly invisible. Internal printed wiring board contains electronic "Smart Sense" circuit to remotely trigger the lamps on transmit by shorting or applying 10-14V to the circuit. Solid oak cabinet • Available in natural oak or black finish • Works with any radio • 13.8 VDC operation • AC wall cube power supply • RCA cord and diode adapter • Recessed rear connectors for flush wall mount ea. **\$69.99**

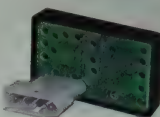
The BetterRF Company



I-MATE Accessory for ICOM PRO Series Provides external selection of pre-recorded voice and keyed messages for the 756PROII and keyed CW mes-

sages for the 746PRO. Eliminates shifting the display from operating mode to memory select mode to transmit prerecorded messages. Four buttons transmit associated message. Provides pulsed sine-wave oscillator for safe tuner and amplifier tuning. Has alternate audio input for second mic. Plugs into transceiver mic jack. Receives power from the available voltage **\$74.99**

706 TUNE CONT Tune up Control for IC-706/718 Plugs into Molex connector on rear of radio. Converts radio's TUNER/CALL button function to TUNE MODE which limits radio 8-10W RF output and produces a sidetone through the speaker. When finished, it reverts back to previous mode and power. No need to switch to AM or RTTY or hold down the PTT switch. Works 160-6M, except not 6M with original IC-706 **\$32.99**





NCS-3230 Multi-RX Receive Console The ultimate in RX audio control from up to 6 receivers! Connect radios, then choose which to monitor, where the audio will appear in the audio field (two modes), and record any or all audio utilizing manual or VOX activation. External recorder required. LEDs indicate which radio(s) are selected. • Built-in stereo amp • Front panel volume and balance controls • "Mute All" button • Use headphones/set or speakers or both • LEDs identify active radios • 12 VDC required • 8.5" w x 3.3" h x 6.6" d **\$349.99**

NCS-1514 Wall Power Supply Designed for use with the 3230 above..... **\$24.99**

NCS-P2PH35-A Cable Kit 6 cables, 6' long, for connecting receivers, transceivers or scanners to the 3230. RCA phono connector (to 3230) on one end and 3.5mm phone plug on the other..... **\$42.99**

NCS-MRX2MS-A Cable Interface Kit For interfacing the 3230 to the 3240. Feeds selected audio from the 3230 to speakers or headphones/set connected to the 3240. Selective muting **\$49.99**

NCS-3240 The Multi-Switcher A "mini-console" that switches all equipment (mic, headset, keyer, foot-switch, etc) to any of four radios using LED-lighted push buttons. Switch between headset, desk/hand mic, TNC, phone patch, sound card, etc. Matches impedance, audio level and pin-out of nearly any mic to virtually any radio. Switches foot/hand-switch and CW keyer to selected radio. Switches radios receive to external speaker or headphones. Requires 12VDC. 8.5" w x 3.3" h x 6.2" d **\$299.99**

NCS-1512 Wall Power Supply For the 3240. 12 VDC output @ 300mA **\$12.99**

NCS-LOZNC Underminated Cable Requires mic connector installation. Other end is an 8-pin DIN male connector to interface with 3240..... **\$17.99**

NCS-3400 Multi-Patch Passive Audio Panel Organizes audio and other signal distribution in a shack. Makes it easy to add or reconfigure equipment. Consists of 5 rows by 10 columns of 3 types of connectors. Each row has 6 RCA phono jacks, 2 3.5mm phone jacks, and 2 standard phone jacks. 6 modular jacks for telephones and phone accessories. Slide switch disconnects 3.5mm and 6.4mm jacks from the 6 RCA jacks allowing each row segment to operate independently. 11.75" w x 4.75" h x 2" d (including mounting flanges) **\$129.99**

See NCS in the Price Guide for Radio Interface Cables for Icom, Kenwood & Yaesu radios.

WAHL ELECTRONICS ISO-TIP

7740 Cordless Soldering Iron Provides tip performance up to 50 watts and over 700°. Contains premium NiCad rechargeable battery for high-rate charging; a partially discharged unit will return to full capacity within 1 to 2 hours, with a complete recharge in 3 to 4.5 hours. Replaceable battery and worklight. Comes with recharging stand, fine and heavy tips **\$47.99**



7971 SolderPro 50 Usable as a soldering iron, torch, hot knife and heat tool using optional interchangeable tips • Heats up from 410°F to 750°F within 10 seconds • Runs up to 30 minutes • No electrical current • Easy refill, powered by standard cigarette lighter butane (not included) **\$19.99**



7974 SolderPro 70 Usable as a portable soldering iron, torch, hot knife and heat tool using optional interchangeable tips • Heats up from 410°F to 850°F within 10 seconds • Runs up to 120 minutes • No electrical current • Easy refill, powered by standard lighter butane (not included) **\$27.99**



82-5000-0004 Rosin Core Solder • 60% tin, 40% lead • .040" diameter • 374° F melting temperature • Non-corrosive • For all electrical applications • 0.5oz. in handy dispensing tube **\$1.99**



ICC NITELOGGER II Automatic Tape Recorder Activator Takes audio output from a radio or scanner and provides an impedance match and voice activated relay operation for a tape recorder. When audio is present, the relay circuit, with adjustable drop out delay, automatically activates the recorder for the duration of the signal, then releases. Simple connection with supplied cables to radio's external jack, and tape recorder remote and mic inputs. AC adapter supplied. 4.37" w x 3.25" h x 2" d **\$69.99**



SOLDER EQUIPMENT

SP-23LK 25W Soldering Iron Kit (middle right) Ideal for hobbies, kits, radios and delicate electronic work. "On" Indicator light. Supplied with three 750° tips, handy soldering tool and solder. Size: 8-1/4 in. long, 1-3/4 oz., Two-wire 6 ft. cord **\$17.99**

W-60P 60W Pencil-Type Soldering Iron (left) For most circuit work. Supplied with 0.0625" 700°F screwdriver tip. 7.5", 2.5 oz., 6' cord, 120V **\$64.99**

WP-25 25W Pencil-Type Soldering Iron For work on delicate electronics. 750°F tip temperature. 7.875" long, 1.75 oz., 4' cord, 120V AC **\$34.99**

WSTA3 Pyropen® Butane Soldering Iron (right w/case) Light-weight and completely portable. Operates up to three hours on a charge of regular cigarette lighter butane (not included). Soldering temperature control is adjustable from 392° to 932°F, with a very fast heat-up time. It's ready to solder in just 30-seconds! Supplied with tips for soldering, hot air (1202°F), and brazing **\$99.99**

WS72 Pyropen® Jr. (middle left) Portable, mini, butane-powered soldering iron. Recharges in seconds from a cigarette lighter butane (not included). Soldering temperature is adjustable from 392° to 842°F. Also, hot blow feature (806°F) and torch feature (2372°F). Has handy pocket clip **\$89.99**

7200PK Multi-purpose Soldering Gun Compact, lightweight, 75W for bigger work, connectors and almost any other heavier job. The flat, self-supporting back acts as a convenient rest when not in use. Carrying case, extra tip and solder. 120VAC. **\$28.99**



WTCPT 42W Temperature-Controlled Soldering Station (left) Ferro-magnetic sensor in tip controls temperature (700°F), no adjustments. Closed loop method protects components. ESD safe. Power unit, soldering iron and stand with sponge. 3-wire 4' cord. 4.5" x 5.94" x 3.63", 3.9 lbs **\$119.99**

WESD51 50W Adjustable Soldering Station Quick heat-up, rapid temperature recovery. Micro-processor-controlled, digital LED display shows setting and tip temperature (350°F to 850°F). Auto power off after 90 minutes of inactivity. ESD safe. Power unit, soldering iron with stand and sponge, 3-wire 4' cord. 5.9" x 4.5" x 3.6", 3.93 lbs **\$149.99**



RIGrunner

The most convenient and safest way to connect to a 12VDC source and distribute it to all equipment. A power panel that uses the excellent Anderson PowerPole® connectors. Perfect for shack or mobile. Eliminate those wall warts! • All models are conservatively rated at 40 amps total with any outlet good to 40 amps • Anderson PowerPole® crimp or solder connectors provide a safe secure, hot connect, polarized, color keyed, genderless connector system

- Conforms to ARES/RACES, RSGB, ARRL recommendation for high current 12VDC connectors
- No messy binding posts, frayed wire connections, black tape or short circuits
- Each outlet is individually fused with automotive ATC/ATO fuses
- Blown fuse LED shows status
- Shipped with appropriate fuses installed.

RR/4010S/C 10 Outlets One "always on" outlet and nine auto or manually-controlled switched outlets. An FET on/off system controls entire station with the power button on your rig. Quick status precision LED and audio voltage monitor. 12 pair crimp solder connectors..... **\$119.99**

RR/4012/C Intelligent DC Power Panel Neatly distributes 12V, up to 40A, from power supply or battery to transceivers and accessories. Perfect for home and mobile applications. 12V input connection fused at 40A and 12 pair of outlets supplied with assortment of standard automotive fuses. LED "open" indicators on every fuse. LED voltage monitor indicates normal voltage, LEDs and audio alert for over/undervoltage conditions. 6' DC cable and 12 pair Anderson Powerpole crimp-solder connectors. 11.8" w x 2.7" h x 1" d..... **\$112.99**

RR/4008/C 8 Outlets Quick status precision LED and audio alert voltage monitor. For small or mobile installations or as expansion unit. 12 pair crimp solder connectors. 5.75" w x 2.7" h x 1" d..... **\$92.99**

RR/4005/C 5 Outlets DC power panel, for small/mobile installs or as expansion unit. 6 pair crimp solder connectors. 5.75" w x 2.7" h x 1" d **\$59.99**



CR/TOOL Crimper/Wire Cutter Handy for installing RIGrunner connectors. Hardened steel, 8" for high leverage, comfortable plastic grip... **\$9.99**

C30/PK/12 12 pair, 30A connectors **\$10.99**

Look For This

NEW

& Check Out AES' Latest Additions.



VELLEMAN

VTTS Multi-Purpose Toolset A quality toolset for the electronic engineer and hobbyist • 4.75" universal handle, 3" extension, 9 different bits, hex adapter, and (4) 1/4" drive sockets • Bits: (Slotted) 1/8, 3/16, 1/4"; (Phillips) #1, #2, #3; (Star) T-15, T-20, T-25 • 4, 5, 6 and 8mm 1/4" drive sockets • 6 precision screwdrivers (4 slotted, 2 Phillips) • 4.5" mini diagonal plier • 5" mini long nose plier • Tweezers • Plastic carry box, 6" x 4" x 2" ... **\$9.99**



VT-SET21N 8-in-1 Screwdriver Set Includes 4 Phillips and 4 slotted screwdrivers. Each screwdriver fits into the handle for greater torque..... **\$4.99**



VT-SET3N 6-Piece Electronics Screwdriver Set Includes T6, T7, T8, T10, T15 x 50mm sizes. Each screwdriver has its own handle and measures 4.2 inches in length **\$7.99**

VT-LAMP2U Magnifier Lamp A 22-Watt, circular daylight fluorescent lamp with 1.75x magnifying glass, 41 inch arm length and convenient table edge mounting clamp **\$49.99**



72887 SUPERADIO III™ High Performance, Long Range AM/FM Portable Radio • Tuned RF stages on both AM and FM • 8" FM swivel whip antenna • 7.875" AM ferrite rod antenna • Ceramic IF filter, plus 3 IF tuned circuits on FM • 4 IF tuned circuits on AM • Selectable normal or wide AM • Switchable AFC • Precision vernier tuning • 6.5" woofer, plus 2" tweeter • Separate bass and treble controls • Volume plus loudness circuitry to boost bass response at low volumes • Headphone jack • AM/FM external antenna terminals • Operates on AC power or 6 D-cells • Fold down carry handle • Metal speaker grille • 12.75" w x 9" h x 3.25" d, 5 lbs **\$49.99**



Q-VIEW QSL CARD HOLDERS

Proudly display your favorite QSL cards in these 12" x 40" clear plastic hanging holders. Each holds 20 3.5" x 5.5" cards. Open at center to receive cards easily. Pack of three (displays 60 cards) **\$18.99**



D-Star System Explore the benefits of wireless High-Speed integrated Digital connections! D-Star is an off-the-shelf, 128K open protocol data system combining analog and digital into a seamless communications network at 1.2 and 10GHz. The power of the system is limited only by one's imagination. For example, while in a vehicle, visually communicate what is happening simply by e-mailing a photo or live video. Icom is the first to introduce products for this innovative communication system. There are repeater and backbone components, and the ID-1 transceiver can be configured as a mobile or base station. • Open protocol TCP/IP structure • Digital voice and data capability • Data 128K (130kHz bandwidth) • ATM multiplex (on the backbone) • Multi-site capability with high speed microwave backbone 10Mbps • Internet interface capability • Repeaters handle both digital and analog voice

ID-1 10W 1.2GHz FM Digital Transceiver with Control Head A vital part of the D-Star system. Don't wait for a new repeater to be set up in your area. This rugged little rig operates with current analog 1.2GHz repeaters, plus simplex digital operation with another ID-1. Its operating frequency range is 1240-1300MHz with FM and GMSK (digital) modulation formats. Includes alphanumeric memories, CTCSS encode/decode and scanning, Full PC control via USB port and supports 10 BASE-T ethernet for 128K data operation **\$1349.99**



FTV-1000 200W 50MHz Transverter for the FT-1000MP MK V Utilizes the same high-performance power MOS FET transistors as the MK V. PA stage operates at 30VDC, provided by the MK V power supply. Output devices, capable of 300W PEP, are run well below their maximum ratings for high reliability. The thermostatically-controlled cross-flow cooling fan keeps operation cool. Exclusive Class-A bias capability is now extended to the FTV-1000 50MHz operation providing the cleanest SSB signal on the band! It also features a high dynamic range receiver front end, utilizing a high-intercept design with JFETs in a double balanced mixer. Driving the mixer is a low-noise-figure MOS FET preamp, two gain selections available. For local, select IPO, bypassing preamp for direct feed to the mixer. 12dB attenuator available when working with extremely strong local signals. Rocker switches control all functions, with LED indicators..... **\$899.99**



HRI-100 Amateur Radio Internet Linking Kit Uses DTMF signalling to connect HT's or Mobile transceivers to the Internet, greatly expanding the coverage area. A repeater-based system, ideal for emergency communications, "sister-city" link-ups, or accessing repeaters world-wide. Includes CD (including manual), power cable, RS-232C/DB-9 data cable, 8-pin mini-DIN plug data cable, 2 sound card in/out cables and WIRES™ II user/server agreement..... **\$149.99**

More WIRES™ II wide-coverage internet repeater enhancement system information can be found at www.vxstd.com/en/wiresinfo/en/



VXR-7000VA 50W 2M FM Desktop Repeater A long list of built in features, sets the standard for mid-power, continuous duty base station and repeater applications. Whether used as a base station, with its attractive housing and user-friendly controls, or as remote repeater in the most demanding environments, the VXR-7000VA will provide years of reliable service. • 136-150MHz • 16 channel synthesized • 10-50W output, adjustable (100% duty) • 12.5/25kHz bandwidth • Programmable 16 tones/codes • ANI/ENI I.D. display • CW transmitter I.D.* • Time-out, hang and guard* timers • BCLO, BTLO • Selectable repeater or base transceiver mode • Selectable local or remote mode • 115/230 VAC, automatic DC supply back-up • 4.5" h x 12.8" w x 15.4" d, 22 lbs..... **\$1269.99**

* Dealer programmed feature



SIRENS & HORNS

VS-2 Emergency Vehicle Siren Designed for the volunteer fireman, a quality-built wail-yelp alarm that delivers big sound performance (120dBa sound level at 4 ft.). Frequency range is 600 to 1200Hz. It is pre-wired with a 3-position switch (Yelp-Off-Wail). High efficiency waterproof horn speaker. Also includes 10 ft. cable, mounting bracket and hardware. 12VDC @ 1.5A, 2.7 lbs **\$89.99**



VS-2LS Siren-Light Combo A one-unit siren and yelp alarm, revolving halogen light and window mount. Fits all cars, slides on top of car window and plugs into cigarette lighter. The power plug contains an "on" LED and three position switch to select Yelp, Off or Wail modes. 12 VDC @ 1.5A. Specify AMBER, BLUE or RED light..... ea. **\$299.99**



VS-3 Vehicle P/A and Airhorn w/Rebroadcast A big, powerful airhorn sound with 4 different sounds (no siren) calls attention to your vehicle. Delivers 120dBa level at 4 ft. Locking down the microphone with the supplied rubber band, you can monitor sound from a mobile rig, scanner, etc. via the speaker outside. Includes horn speaker, microphone, electronic center, 10 ft. cable, mounting bracket and hardware. 12 VDC @ 1.5A..... **\$129.99**

VS-4 P/A Emergency Vehicle Siren Contains P/A, rebroadcast, wail, yelp, pulse and airhorn. P/A override features, plus volume control of all siren modes. Restricts output when operating in people places. Includes horn speaker, microphone, electronic center (3 x 3.5 x 2 in.), 10 ft. cable, mounting bracket and hardware. 12V DC @ 1.5A.... **\$139.99**



13810 Sticky Pad® No more slipping or sliding! The Sticky Pad holds objects in place on your vehicle dash. There are no adhesives to get messy or magnets to ruin electronic equipment. The back of the pad allows it to stay anywhere you place it while also being movable. The Sticky Pad is washable and reusable. 7.25" x 4.13" x 0.19"..... **\$5.99**



SIRIUS
Satellite Radio

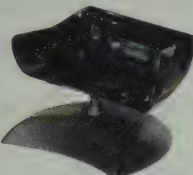


KTC-H2A1 100 Streams Of Satellite Radio Every minute of every day, SIRIUS beams programming to three state-of-the-art satellites moving high above the earth in figure eight, geo-synchronous orbits. The programming is then broadcast back down to every inch of the continental U.S. to your radio wherever you go with no signal fades. • 60 streams 100% commercial-free music • 40 streams of sports, news, and entertainment from CNBC, ESPN, NPR, Radio Disney, E! Entertainment, Discovery Channel and more • Over a half million songs streamed into your sound system every month (pop, rock, country, hip-hop, R&B, dance, jazz/standards, classical) • Live, in-studio performances and interviews • Stream jockey musicians, genre experts, and music fanatics who are knowledgeable about the musicians and songs they play • Plug & Play - for car or home with optional docking stations • Subscription required • 5" w x 3.5" h x 4.5" d, 14 oz..... **\$99.99**

KPA-H2H Home Docking Kit Home antenna, power supply, remote control, RCA cable.. **\$49.99**

KPA-H2C Docking Kit for Car Magnet mount antenna, cigarette and cassette adapters..... **\$29.99**

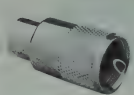
1-888-539-SIRIUS or www.sirius.com for more info.



HSC-99 HamHub™ Station Controller Integrated interface to connect and control mic, headset, footswitch, TNC, rotor, transceiver and computer. • Provides isolation of critical audio circuits and opto-isolation of RS-232 and control in/outputs • Both sound card and TNC in/outputs are transformer isolated to eliminate ground-loops • Uses single USB connection (computer) and provides 3 opto-isolated RS-232 serial COM ports for TNC, rotor and rig control (serial output configurable to match some older TTL rigs) • Full-time audio multi-level indicators on both in/output circuits match audio levels between equipment • Internal high-speed micro-controller implements and supervises functions making them transparent to the user • Soft/hardware controls interlock - choose which overrides the other • Operates with most soundcard and software control programs..... **\$349.99**

UHF CONNECTORS

General purpose and, with the use of optional reducing adapters, accommodate a wide range of applications. Rated for up to 300 MHz. Impedance is non-constant and voltage rating is 500V peak.



AMPHENOL

83-1SP-1050 (PL-259) Male coax plug



83-1SP (PL-259) Silver-plated coax plug

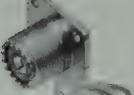
VAN GORDEN

SILVER PLATED (PL-259) Teflon



AMPHENOL

83-878 UHF single hole bulkhead receptacle



AMPHENOL

83-1R (SO-239) UHF panel receptacle



83-1H (UG-106) Hood for 83-1R for inline use



AMPHENOL PL-259

REDUCING ADAPTERS

83-185-RFX For RG-58

83-168-RFX For RG-59/8X

TYPE N CONNECTORS

Constant 50Ω impedance, excellent performance up to 11 GHz and 1,500V peak. Internal gaskets provide better weather resistance than the standard UHF type.

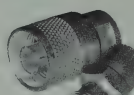


AMPHENOL

82-61 Male for RG-8

82-202-1006 Male for 8214/9913/9913F

34025 Male for RG-58



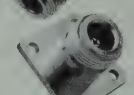
VAN GORDEN

N CONNECTOR Male EZ-install type for 9913/8214



AMPHENOL

82-209 Female in-line for RG-8



AMPHENOL

82-24 Type-N panel receptacle

AIM

26-8011 Type-N chassis mount

BNC CONNECTORS

Miniature, lightweight connectors for RG-58/59 type coax. Quick disconnect bayonet coupling, small size and low cost. Rated for up to 4 GHz. Impedance is 50Ω nominal. Voltage rating is 500V peak.



AMPHENOL

31-002 Male for RG-58

31-012 Male for RG-59/8X



AIM

27-8450 4-screw chassis mount, screws not included



AIM

27-8470 Dual chassis mount



AIM

27-8460 3/8" hole chassis mount



AMPHENOL

31-221 Female chassis socket

MICROPHONE AND DIN CONNECTORS



VANCO

CBC-8P Panel mount 8-pin male



KENWOOD

7-PIN DIN plug

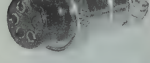
8-PIN DIN plug

13-PIN DIN plug



PHILMORE

61-608B 8-pin female mic plug

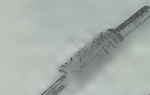


VANCO

CBC-4 4-pin female mic plug

CBC-5 5-pin female mic plug

CBC-6 6-pin female mic plug



HOUSE OF DEALS

AP-115 1/4" metal stereo plug



HOUSE OF DEALS

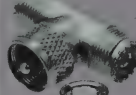
AP-135 3.5mm stereo mini phone



DALBANI

15-0293 3.5mm mono plug

COAXIAL ADAPTERS



AMPHENOL

83-1T UHF T-connector adapter (M-358)



AIM

27-8140 BNC T (2 fem, 1 male)



AMPHENOL

83-877 UHF double male adapter

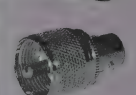


AMPHENOL

4400 SO-239 to Type-N male

AIM

26-8015 Type-N male to SO-239

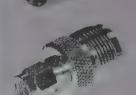


AMPHENOL

31-28 BNC female to PL-259

AIM

27-8120 BNC female to PL-259



HOUSE OF DEALS

SMA-872 SO-239 to SMA adapter



AIM

27-8130 BNC double male



AMPHENOL

2900 SO-239 to BNC male adapter

AIM

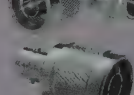
25-7420 BNC male to SO-239

26-8017 BNC male to N female



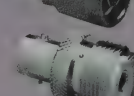
AMPHENOL

83-1AP UHF right angle (UG-146)



AMPHENOL

82-64 Type-N right angle adapter



AIM

26-8016 BNC female to N male



AIM

25-7365 BNC female to SO-239



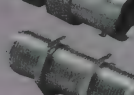
AIM

29-4140 SO-239 to mini PL-259



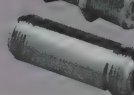
AMPHENOL

83-1J UHF double female (PL-258)



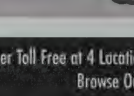
AIM

29-3855 BNC female to SMA male



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25-7351 Chassis mt SO-239 double female



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26-8010 Type-N double female

Prices for all items on this page can be found under CONNECTORS in the Price Guide.

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DAMAGED ITEMS If you discover a damaged shipment, **THE CARRIER SHOULD BE NOTIFIED IMMEDIATELY**. The merchandise should not be returned to us until notified to do so by the carrier. All packaging materials must be retained including styrofoam peanuts, inner and outer cartons, labeling, etc. for inspection by the carrier or the claim may be denied. With shipments properly packaged (as all our shipments are), the ultimate responsibility for delivery in good condition rests with the carrier.

DEFECTIVE ITEMS Defective items should be returned to AES or the manufacturer for warranty repair or replacement, at our discretion. After processing, we will return it via ground method, at our expense in the 48 contiguous states. If you receive defective equipment, call our Customer Service Department at 414-358-4087 for instructions. Canadians please see "Canadians Note:" under TRADE-INS.

INTERNET ORDERS The customer may order products directly on our web site via our internet order form. If the customer does not have access to the web, but has an e-mail account, the customer may e-mail his/her order making sure the following information is included: full name, call sign (not required to order), phone number, billing address, shipping address, item(s) to be purchased (model number and manufacturer) and method of payment. If paying by credit card, we need the card number and expiration date.

PAYMENT Accepted forms of payment are electronic bank transfer, certified check, personal check, money order, credit card (VISA, MasterCard, Discover, American Express, IMPAC), or COD. The customer's choices of payment methods may depend on amount of purchase or destination of shipment.

PRICING We will pass on decreases in pricing to our customers whenever possible. Due to foreign currency fluctuations, promotions, manufacturers' specials, etc.; prices may vary, so be sure to confirm prices when ordering. All prices and specifications are subject to change without notice. **AMATEUR ELECTRONIC SUPPLY®** is not responsible for typographical errors or omissions.

REFUNDS Amounts under \$5.00 are not refunded unless requested in writing to the Milwaukee headquarters within 12 months.

RETURNS In order to maintain the lowest possible prices, we do not offer a free trial or evaluation period on new equipment. If permitted, an **Authorized** return of merchandise for credit (it must be like new with all original packaging) will be subject to a **Minimum 15% Restocking Fee**. The item must be returned within **10 days** after receipt, prepaid, with a copy of the purchase invoice and a letter describing the reason for the return. No returns on antennas, towers, cable, items drop-shipped from the manufacturer, audio or video tapes, kits, books, or computer software. Canadians please see "Canadians Note:" under TRADE-INS.

PACKING FOR SERVICE AND/OR RETURN When returning heavy, delicate, and expensive equipment, it must be carefully packed in order to avoid damage caused by normal transportation dynamics. When contents of packages are damaged, claims will be paid only if the carton and packing meet standards set in the International Safe Transit Association Procedure 1 and 1-A. These standards simply state that cartons and packing should provide reasonable protection to their contents. Ideally, contents should be suspended in the center of the carton by the packing material, no less than three inches on all sides for heavy items. For items heavier than 20 lbs., 3" of foam or crumpled paper should be used instead of polystyrene edge protectors.

When you send your well-packed parcel to AES, be sure to include a letter inside the package stating your call, name, address, e-mail address, phone and reason for return. Do not rely on information written or taped on the outside of the carton.

SHIPPING Shipping charges, which include adequate insurance, are

based on the Order Total at the time of the initial shipment (COD fees not included). The order amount on which charges are determined is pre-coupon and pre-tax (see chart on this page for rates). Cancellations on partially shipped orders will not affect the shipping charges. All back-orders from partially shipped orders are shipped PREPAID at the expense of AES® via Ground Service, only. Shipping calculations on Ground method to the contiguous 48 states have been simplified by utilizing flat-rate categories (see chart on this page for rates). Other expedited methods and any USPS methods are charged at regular rates without any credit for ground rates. CODs are not accepted for these faster methods.

Shipments to APO/FPO are via Priority Mail. Orders exceeding ground method weight, size or value limits will be shipped via Truck or Air Freight collect. Shipping charges taxable in WI, FL & NV.

To insure orders arrive quickly, AES stocks items at all four locations. Occasionally, an item will be temporarily unavailable at certain branches, due to various reasons. In this case, AES will ship the order from a location that has the needed item.

FLAT RATE SHIPPING via Ground in the contiguous 48 States

AMOUNT OF ORDER	SHIPPING CHARGES
Up to \$100.00	\$4.99
\$100.01 to \$500.00	\$9.99
\$500.01 to \$1,499.99	\$14.99
\$1500.00 & UP	PREPAID

Flat Rate Does Not Apply To Drop Shipments
Flat Rate Advantage – No Penalty for Number of Cartons or Weight!

TRADE-INS Amateur Electronic Supply® accepts trade-ins on new equipment purchases, the worth of which is determined by the electrical and physical condition of the item. Estimates are given assuming the trade-in is in good electrical and physical condition. If it is not, a deduction will be made.

To facilitate a trade-in, the customer can choose one of the following: (A) Purchase the new item(s), send in the trade for evaluation, and have the trade-in amount refunded or credited. (B) Send in the trade and have the order held until the trade-in amount is determined.

When shipping trade-ins for evaluation, use a sturdy carton (double boxing is recommended) and plenty of packing material. Ship PREPAID & FULLY INSURED. Do not use Bus or Parcel Post. Collect shipments will not be accepted.

AES® assumes no responsibility for damage in transit or for filing of damage claims. Canadians, inquire locally about taxes and/or customs charges before releasing your shipment.

Canadians Note: Returned equipment not originally manufactured in the U.S. will be subject to valuation and custom charges, plus broker's fees. Check customs before shipping anything to us, including new equipment for warranty repair. We will not accept any shipments from outside of the U.S. unless all fees are paid in advance.

BIDS & PURCHASE ORDERS AES® accepts written and signed Purchase Orders from well rated D&B companies, military, schools, colleges, universities and federal, state, county and city Government agencies. We welcome the chance to bid on your requirements and search the Internet daily for requests from all Government agencies. We are registered with FACNET and accept Government I.M.P.A.C.® charge cards. Net terms available to Government agencies, schools, and companies highly rated in Dunn & Bradstreet.

For more information, please contact Paul Szczerbinski, W9KHO (pauls@aesham.com) at AES® Milwaukee. Toll Free: 1-800-558-0411, Local: 414-358-0333 or Fax: 414-358-3337

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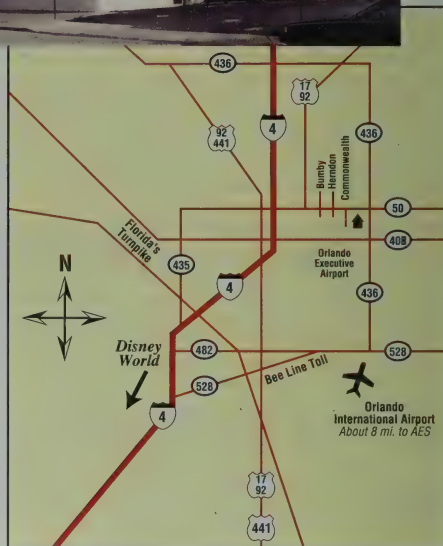
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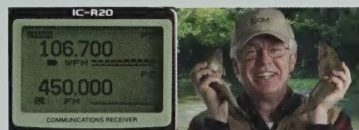
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